

THE ROGIET HOARD AND THE COINAGE OF ALLECTUS

EDWARD BESLY

Introduction

THE three-and-a-half centuries of Roman rule in Britain have left an extensive legacy, not least in the form of coinage. The system of coinage introduced under Augustus (27 BC–AD 14) – gold aurei, silver denarii and a range of copper alloy denominations – provided the money used in the province for over two hundred years until its final collapse in debasement and inflation around AD 270. There followed a quarter of a century in which a partial reform by the emperor Aurelian (270–5) appears to have had relatively little impact in Britain: hoards and individual finds point to continued circulation of the basest ‘radiates’ (double-denarii)¹ of the recently-suppressed ‘Romano-Gallic’ state (260–74), contemporary issues of legitimate emperors such as Gallienus (260–8) and Claudius II (268–70) and widespread production of unofficial imitations, notably of coins of the Gallic usurpers Victorinus (269–71) and Tetricus I and II (271–4); with gold and silver nowhere to be seen. Around 286–7, Britain and parts of northern Gaul became the scene of another usurpation, by the fleet commander Carausius, who had fallen out with the legitimate emperors Diocletian and Maximian. Carausius was in turn murdered and succeeded by his minister Allectus, in 293. Carausius issued the first fine-silver denarii for nearly a century and both he and Allectus produced gold coinage, the latter apparently in some quantity. At the everyday level, both issued billon coinage on the pattern of Aurelian’s reformed issues (these are known today as aureliani); the numerous British hoards of the time, however, are mostly dominated by the debased ‘Gallic’ issues. The ‘British’ state was reincorporated into the Empire in 295 or 296. In the meantime, in 294–5, Diocletian undertook a fundamental reform, introducing a uniform coinage empire-wide that set the pattern for the fourth century. After reconquest, the coinage of Carausius and Allectus was suppressed and the new currency imposed in Britain.

In the absence of reliable historical evidence for the ‘British’ empire of Carausius and Allectus, interpretation of its coinage has assumed considerable significance.² Understanding of this coinage has unfortunately been hampered by the rarity of well-preserved specimens and hoard groups and some published work has been highly speculative, from the time of Stukeley, in the eighteenth century, to the present. In September 1998, however, an unusual and significant hoard dating from the reign of Allectus was found in south-east Wales and this provides a rare opportunity to examine a well-preserved sample of one element of the coinage of the ‘British’ empire – the Q-radiates, or ‘quinarii’ of Allectus. The purpose of this paper is to place on record this remarkable assemblage and its context in the monetary circulation of the north-western part of the Empire; new evidence on the minting of aureliani; and to discuss the Q-radiates of Allectus and their place in Romano-British currency on the eve of reconquest and monetary reform.

Acknowledgements. This report is published with the aid of a substantial grant from Amgueddfa Cymru – National Museum Wales. I am grateful to my colleagues Mary Davis, Penny Hill and Louise Mumford, for their superb conservation of the hoard; to Mary Davis for her analytical work; Jim Wild, photography; Sally Carter, documentation; Jackie Chadwick, for the splendid drawings that form Figs 1, 5, 6, 8 and 9; and Richard Brewer, for his support and encouragement; Cathy King and David Algar for information on the Ewelme and East Harnham hoards, respectively; Richard Abdy, who shared his catalogue of the recent Gilmorton hoard and his work on the new Gloucester list; Volker Heuchert, Ashmolean Museum; Adrian Popescu, Fitzwilliam Museum; Donald Bateson, Hunterian Museum. Michel Amandry and Sylviane Estiot kindly answered questions on some coins in the Bibliothèque nationale de France, and I am particularly indebted to Sylviane Estiot for her comments on the coinage of Probus. Roger Bland commented helpfully on an early draft. Especial thanks to Stewart Lyon for his patience in explaining things statistical. Thanks also to Classical Numismatic Group, Inc, for permission to reproduce an image from their sales and to the Ashmolean Museum, the Trustees of the British Museum and the Hunterian Museum, University of Glasgow, for the use of images of coins in their collections. The text and all other images are Copyright © National Museum of Wales.

¹ The term ‘radiate’ is descriptive, from the rayed crown of the emperor’s effigy that distinguished this double-denomination from single denarii, which bore laureate or bare-headed portraits. ‘Radiates’ of the empresses in fact depict a crescent behind the portrait bust.

² See Casey 1994, Chapters 5, 6, 10 and Shiel 1977; see now also Williams 2004.

In terms of design and production, the coinage of the later third century lacks in general the quality of that from earlier imperial periods, though amongst the aureliani are to be found some very handsome specimens. However, the rapid turnover of the 'soldier-emperors' of the third century, the debasements and attempted reforms of the coinage and the complications of several significant usurpations have given the Rogiet deposit an unusually varied composition amongst Romano-British coin hoards. Its forty-year span covers coins from eighteen reigns, in the names of twenty-six emperors or members of their families, with over 1,050 individual varieties.

THE HOARD AND ITS CONTEXT

Discovery

The hoard was discovered on 10 September 1998 by Colin Roberts, who was using a metal detector on farmland between Llanfihangel Rogiet and Rogiet (ST 4587), approximately 2 km west of Caldicot, Monmouthshire.³ The find was promptly reported to the National Museum of Wales (NMW) and to HM Coroner for Gwent, as required by the Treasure Act 1996, which had come into force in England and Wales on 24 September 1997, replacing the former common law of Treasure Trove. The site was visited on 11 September by staff of NMW and the Glamorgan-Gwent Archaeological Trust to record the findspot and take delivery of the coins. The hoard, which at this stage numbered 3,778 coins, was declared treasure at an inquest in Newport on 10 December 1998 and was acquired in May 1999 by NMW (accession number 99.31H). It transpired subsequently that small numbers of coins had been found at the site for some years previously and the total number of coins certainly attributable to the deposit now stands at 3,813.⁴

Under previous treasure trove practice, the Rogiet hoard would have received no legal protection, since it consists of copper alloy coins containing very little precious metal. The hoard can claim a special place in the history of treasure law and practice in England and Wales as the first significant hoard of base metal coins to be declared treasure under the terms of the 1996 Act.⁵

Archaeological Context

The hoard was found by metal detecting on recently-seeded grassland, in a field that had been under cultivation for many years. According to the finder, the first coins were located in plough soil and the bulk of the hoard at a depth between 14 and 20 inches (0.35–0.50 m). As examined on 11 September 1998, the find spot comprised a roughly oval hole 0.82 m by 0.34 m; some 0.3 m of plough soil overlay a subsoil c.0.2 m deep which in turn rested on an orange/red sandy gravel with some larger rounded pebbles in it. No trace survived of the original depositor's cut, but this appears not to have penetrated the natural gravel. There was no sign of a container, but the finder reported several small iron nails which, with the general shape of his excavation, might suggest that the coins had been deposited in a rectangular wooden box, though this is not certain. No traces of mineralised fabric were observed on any of the coins. The hole also yielded a few sherds of worn pottery; pottery and stone scatters and a number of late third- and fourth-century coins have been found elsewhere in the field.

The hoard site is near the shore of the Severn Estuary on a slightly elevated area of land (c.10 m O.D.) between the Caldicot Levels to the south and hills rising to 82 m O.D. to the north. (In terms of the modern landscape this lies between the M4 motorway/Great Western Railway to the south and the M48 to the north.) Excavations in 1996 in the adjacent field to the east, ahead of residential development, located a Roman building in stone, of probable second-century date.⁶ About 3 km to the north, over the hills, lies the important Roman town and 'tribal capital' of

³ 'Rogiet' is pronounced with a hard G: 'Rog – it'.

⁴ Of the supplementary coins, six have subsequently been acquired by NMW (2000.7H/1–5; 2002.14H).

⁵ See *Treasure Annual Report 1998–1999* (London, 2000), pp. 121–2, no. 306; a preliminary report, which shared the title of the present paper, was delivered to the British Numismatic Society's meeting on 25 June 2002.

⁶ Marvell 1996.

Caerwent (*Venta Silurum*); to the west, just under 12 km away, is the legionary fortress of *Isca* at Caerleon. The 'shore fort' at Cardiff, further to the west, was built towards the end of the third century (Fig. 1).

Composition

The Rogiet hoard comprises 3,813 coins of the middle and later years of the third century AD, summarised by reign and by mint in Table 1. These are, essentially, of copper alloy with small added percentages of silver and many, on cleaning, proved to retain the silvered surfaces that were applied to these issues. The coins cover the period from AD 253 to the reign of the 'British' usurper Allectus. The latest coins of the Central (official) emperors are two of Maximian of AD 293 (954–5) and there are three aureliani (1006–8) of Allectus, who took power in Britain the same year. The question of the hoard's date revolves, however, around the interpretation of the 757 'Q-radiates', or 'quinarii' of Allectus: they will be considered in detail below.

In broad terms, the hoard contains three significant components: unreformed radiates of 253–c.274 (i.e. including early coins of Aurelian) and their Romano-Gallic counterparts of 260–74; aureliani from Aurelian's reform through to Diocletian and Maximian, together with small numbers of similar coins of Carausius and Allectus; and the Q-radiates of Allectus. Several features stand out immediately: the large quantity of aureliani, which are usually present in British hoards only in very small numbers; the relatively small group of coins of 260–74 and the virtual absence of coins of the Tetrici; and the Allectan Q-radiates, the first significant group of these enigmatic coins to become available for study in recent times. The great Blackmoor hoard of 1873 included fewer than 80 (less than 0.3 per cent of the deposit), while the Old Ford (1866) hoard – seemingly a potful of Q-radiates – was dispersed without a proper record.⁷

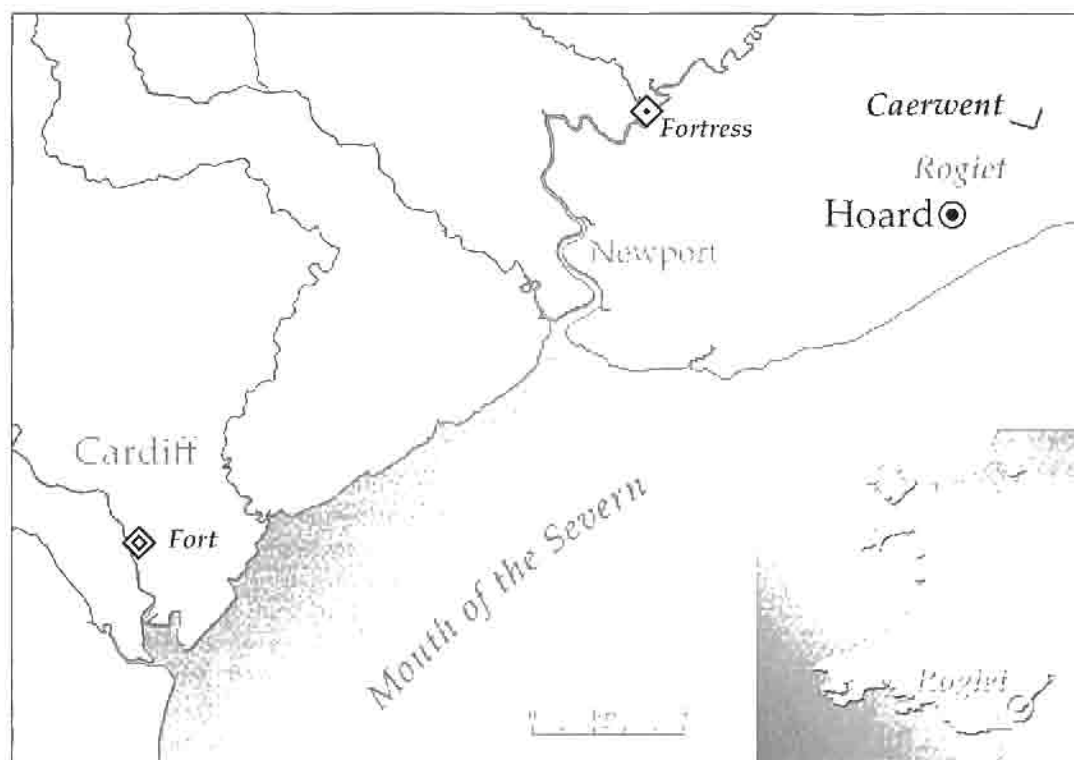


Fig. 1 The location of the Rogiet hoard (NMW/Jackie Chadwick).

⁷ To save repetition, general references to hoard publications are given in a separate Bibliography (pp. 144–5), which for British hoards also gives the counties in which they were found.

Typically, late third-century Romano-British hoards (and many from Gaul) consist of large numbers of the base and 'unreformed' radiates of 260–74; two-thirds or more of these are usually coins of the Romano-Gallic emperors Victorinus (269–71) and Tetricus I and II (271–4), with the remaining third mostly of Gallienus (260–8) and Claudius II (268–70). These are supplemented by varying numbers, usually small, of the reformed aureliani of the 270s and 280s and by irregular issues ('barbarous radiates').⁸ The picture is less clear-cut during the British Empire (c.287–95/6): Bland and Burnett, publishing the Normanby hoard, identified four categories of hoard during this period, consisting of 'reformed' coins (which include mint-signed issues of Carausius and Allectus) or 'unreformed' coins (including early Carausian issues, as well as the Q-radiates of Allectus), each with or without pre-Carausian issues. The presence or absence of a type of coin, it was argued, could be seen in terms of different 'monetary categories (= denominations?)'.⁹

Only one other British find is known that contains large numbers of aureliani, the Gloucester (Cross) hoard, found in 1960 and still unpublished. This comprised over 15,500 coins closing, like Rogiet, with Allectus; but, unlike Rogiet, the hoard virtually excludes coins of 260–74. Another hoard, from Linchmere, consists of 812 coins, two-thirds of them mint-signed issues of Carausius, the remainder almost entirely aureliani. These two hoards form the first category, 'reformed coins, including pre-Carausian'. The second, 'reformed coins, none before Carausius', is exemplified by Burton Latimer and Colchester. The third and fourth categories, 'unreformed coins', include hoards such as Normanby, Blackmoor and, in Wales, Erw-Hên ('including pre-Carausian'); and Croydon and Old Ford ('none before Carausius').

TABLE 2. Percentage compositions of selected 'British Empire' hoards (modified from Bland and Burnett (1988), Table 3)

	<i>Normanby</i>	<i>Erw-Hên</i>	<i>Croydon</i>	<i>Linchmere</i>	<i>Blackmoor</i>	<i>B. Latimer</i>	<i>Colchester</i>	<i>E Harnham</i>	<i>Gloucester</i>	<i>Rogiet</i>
<i>Gallienus-Quintillus</i>	25.6	26.2	2.3	–	27.8	–	3.0	82.6	0.3	3.2
<i>Postumus-Tetrici</i>	69.2	70.2	5.7	0.4	66.7	0.1	5.7	0.3	<0.1	2.8
<i>Aurelian-Tetrarchy</i>	0.3	2.0	–	33.7	3.3	–	0.3	15.8	99.2	72.7
<i>Carausius unmarked</i>	0.2	1.3	72.6	4.1	0.8	2.7	1.3	–	0.1	0.1
<i>Carausius marked</i>	0.1	0.1	19.0	61.7	0.6	50.9	32.9	–	0.1	0.4
<i>'Diocletian, Maximian'</i>	–	–	–	–	0.1	0.1	0.6	1.2	0.1	0.2
<i>Allectus aureliani</i>	–	–	–	–	0.1	44.4	41.4	–	0.1	0.1
<i>Allectus Q-radiates</i>	–	–	–	–	0.2	–	0.7	–	–	19.9
<i>Number of coins</i>	47,912	684	84	812	29,802	108	298	3,705	15,544	3,813
<i>Bland-Burnett category</i>	3	3	4	1	3	2	2	3/L	1/L	

A further complication lies in the hoards which have come to be known as 'legitimist': those where coins of usurpers appear to have been consciously excluded. These hoards appear mainly to be western: Gloucester, for instance, includes a single coin of Victorinus and only 38 coins of Carausius (many in the names of Diocletian and Maximian) and Allectus, in all around 0.25% of the hoard; East Harnham avoids Carausius altogether, while including some of his 'Diocletian' and 'Maximian' issues. In Bland and Burnett's view, 'legitimist' hoards can form sub-classes, perhaps slightly later, of their four categories of British Empire hoards.

In its composition, therefore, Rogiet appears – uniquely in Britain – to straddle the various categories: it contains both reformed and unreformed coins, pre-Carausian and Carausian coins and Q-radiates in quantity. On the Bland and Burnett model, it may be seen to form a fifth category, consisting of around 1,250 'unreformed' coins (radiates and Q-radiates) – and about 2,560 'reformed' coins (aureliani) from Aurelian to Allectus, though there may have been some blurring of the two categories, based on size, in the mind of the hoard's owner.

A closer look at the 'unreformed' element underlines and expands this view: the unreformed radiates appear to have been carefully selected. Not only are the weights of the pre-270 and Gallic

⁸ Cheesman 1997 summarises and discusses fifty late third century hoards from Britain published since 1981.

⁹ Bland and Burnett 1988, 114–18.

coins generally higher than might be expected (see below), but the worst-debased issues are absent, presumably deliberately excluded or unavailable to the hoarder. Thus there are no coins of Claudius II. Rome issue 3 in the Normanby scheme, the very worst of his issues, though the following issue is present. Coins of Victorinus stop mid-reign at mint I, issue 3 (PAX AVG/INVICTVS) and mint II, issue 4 (VICTORIA AVG); his lighter late issues are avoided. Most striking is the complete absence of the Tetrici, apart from two late coins of Tetricus II, both of good weight. The impression of careful selection is reinforced by the irregular coins: there are only eleven, the majority well silvered copies of Postumus, forming just under 0.3% of the whole deposit. Rogiet may therefore be described as a 'two-denomination' hoard, in which the 'unreformed' element of coins pre-274 shows every sign of having been carefully selected.

Formal evidence for the disposition of the coins within the hoard was lost before it could be examined. However, during the sorting of the hoard forty-five fused clusters (mainly pairs and groups of three, with a few larger groups) were observed and their compositions noted in outline. Of these, twenty-three comprised solely aureliani and a further eight contained aureliani and coins of Aurelian (phase not noted); two comprised pre-274 radiates and seven solely Q-radiates. Five clusters mixed the categories: two paired a pre-274 coin with an aurelianus; three, aureliani and Q-radiates. Of these last, there was one pair and two groups – of three and five coins – with the Q-radiates on the outside. Some segregation of categories within the hoard may perhaps be inferred, but this cannot now be proved.

The circulation of aureliani in Britain

The term aurelianus has come into use in recent years to describe the reformed radiates of Aurelian and his successors, first issued around 274, by analogy with the name antoninianus applied to the radiate double-denarii originally introduced by Caracalla (Antoninus) in 215.¹⁰ These demonstrate improved weights and better workmanship than the highly debased issues of radiates down to 274; many, though by no means all, bear in the reverse exergue the formula 'XXI' (or the Greek equivalent, KA), taken to refer to the metal, which equates to one part of silver to twenty of alloy. Other control-marks identify production units (*officinae*), issues and sometimes the mint. At the time of the reform, smaller laureate pieces ('denarii') were also issued in some quantity at Rome, though this initiative was not sustained in subsequent reigns, except in very small numbers.¹¹

Aureliani formed the basis of everyday currency for around twenty years, until the Augustan system was finally done away with through Diocletian's reform. Significant hoards of aureliani have been found, notably La Venèra (Italy), Svetozarevo (former Yugoslavia: today Jagodina, Serbia), Maravielle (Var, France), Navis-Mühlen (Austria) and Gloucester. Nevertheless, nearly one quarter of La Venèra comprised issues before 270 (Table 3). Gloucester and Rogiet appear to be atypical, as far as the territory of the former Romano-Gallic Empire is concerned, where numerous hoards have been recorded that consist for the most part of issues of the period 260–74: Gallienus, Claudius II, Victorinus and the Tetrici, with varying but usually small numbers of aureliani.¹² This pattern is paralleled elsewhere, for instance in the Plovdiv hoard (Bulgaria), a hoard of the 280s, in which coins of Gallienus and Claudius account for over 80% of the whole. The 1896 Nieder-Rentgen (Lorraine: now Basse-Rentgen, Moselle, France) hoard, however, strikes a more even balance, with reformed issues comprising around 40% of a deposit of 14,074 coins.

Nevertheless, aureliani did circulate in Britain, albeit generally in small numbers. As well as in hoards, they are found occasionally as isolated single losses and in archaeological excavations. A hoard found at the Wint Hill villa site at Banwell, Somerset, comprised nineteen aureliani and eleven radiates. Most of the supply to Britain (if formal supply there was) came from the Lyon mint, successor to the 'Gallic' mints. In 280, for instance, there was an uncirculated batch of

¹⁰ 'Aurelianus' has also been used, but the shorter and more easily pronounced version appears to have established itself.

¹¹ The coinage also encompassed gold and copper alloy denominations, which fall outside the scope of this paper.

¹² See Bland and Burnet 1988, Table 2.

TABLE 3. Examples of hoards principally composed of aureliani (percentage compositions)

	<i>Maravielle</i>	<i>Svetozarevo</i>	<i>La Venèra</i> *	<i>Navis-Mühlen</i>	<i>Gloucester</i> **
Pre-270 and Gallic	0.9	0.7	24.2	0.1	0.4
Aurelian and Severina	38.0	35.5	23.9	7.1	17.2
Tacitus and Florian	10.0	8.7	6.5	2.8	25.0
Probus	39.8	51.8	28.5	81.0	42.4
Carus and family	11.2	3.3	9.6	3.0	4.8
Diocletian and Maximian	0.2	0.1	7.3	6.0	9.8
Other	-	-	<0.1	0.1	0.2
Total	1,745	1,973	46,372	1,745	15,544

*Figures from Milani; ** Gloucester figures provisional

Tacitus from Lyon in the hands of the owner of the Kirmington hoard. There is also evidence a little later for separation of aureliani from other radiates in the Tattershall Thorpe hoard (c.281); and later still, in Penard (c.290). With time, coins of more distant mints appeared (see for instance the case of Probus, Table 4), suggesting a gradual mixing of coinage through various transactions, leading to a similar pattern to that observed later for the Tetrarchic nummi. With the issuing of aureliani by Carausius and Allectus, their use finally seems to have become more important in Britain – just in time for the monetary system to be completely changed by Diocletian.

TABLE 4. Coins of Probus in British hoards, c.276–86

<i>Terminus</i>	<i>Lyon</i>	<i>Ticinum</i>	<i>Rome</i>	<i>Siscia</i>	<i>Total</i>	<i>Hoards</i>
276–7	15	1	–	–	16	Riby, Bowcombe
%	93.8	6.2				
280	32	4	1	–	37	Chalgrave, Hollingbourne, Kirmington
%	86.4	10.8	2.7			
281	146	12	13	–	171	Chalfont, Child's Ercall, Kirkby, Minster, Tattershall Thorpe
%	85.3	7.0	7.6			
282	168	17	11	3	199	Appleshaw, Coleby, Knaresborough, Maltby
%	84.4	8.5	5.5	1.5		
284–6	55	16	17	3	91	Banwell, Monkton Farleigh, Much Wenlock
%	60.4	17.6	18.7	3.3		

Table 5 summarises the occurrence of aureliani in British hoards. Apart from the massive Gloucester deposit, Rogiet and Blackmoor are the only British finds to contain significant numbers (though in Blackmoor these still represent less than four per cent of the whole). Twenty-four other hoards collectively provide a sample somewhat smaller than that from Rogiet alone.

TABLE 5. Central Empire coins of 274–94 in British hoards

	<i>Rogiet</i>	%	<i>Gloucester</i>	%	<i>Blackmoor</i>	%	<i>24 others</i> *	%
<i>Aurelian and Severina</i>	103	4.1	707	5.2	34	4.8	74	3.7
<i>Tacitus</i>	649	25.7	3,692	27.4	163	23.1	699	34.7
<i>Florian</i>	40	1.6	200	1.5	10	1.4	28	1.4
<i>Probus</i>	1,339	53.1	6,586	48.9	341	48.3	947	47.1
<i>Carus and family</i>	117	4.6	753	4.3	44	6.2	59	2.9
<i>Diocletian and Maximian</i>	276	10.9	1,531	11.4	113	16.0	205	10.2
Totals	2,524†		13,469		705		2,012	

*Appleshaw, Banwell, Bath, Bowcombe, Chalfont, Chalgrave, Childs Ercall, Coleby, E. Harnham, Gilmorton, Hollingbourne, Kirkby, Knaresborough, Lacock, Linchmere, Maltby, Minster, Monkton Farleigh, Much Wenlock, Normanby, Penard, Riby, Somerset, Tattershall Thorpe.

†Total excludes 17 coins in uncleaned clusters.

Distribution by mints within the individual reigns to 293 is set out in Table 6, together with summaries of two significant hoards from different areas in Gaul – the north-east (Nieder-Rentgen) and south (Maravielle). Lyon, Rome and Ticinum (in succession to Milan) are well represented, but post-reform coins of Siscia are severely reduced as a proportion of the whole, compared with Aurelian's pre-reform issues.¹³ This appears to be typical for British finds: a small but reasonably consistent trickle of issues from Siscia and more easterly mints is observed here and similarly in hoards of nummi deposited after Diocletian's reform at the end of the century, by which time new mints at London and Trier had joined Lyon as the principal sources of supply.¹⁴

TABLE 6. Mint distribution by reign in selected British and Gallic hoards (percentages)

	<i>Lyon</i>	<i>Rome</i>	<i>Ticinum</i>	<i>Siscia</i>	<i>Serdica</i>	<i>Cyzicus</i>	<i>Antioch</i>	<i>Total</i>
Aurelian								
Gloucester	6.6	25.3	49.9	10.3	2.1	5.4	0.3	707
Rogiet	5.8	25.2	53.4	12.6	1.0	1.9	–	103
25 British	9.3	22.4	56.1	10.3	0.9	0.9	–	107
N-Rentgen	1.2	43.6	30.0	17.2	4.3	3.7	–	163
Maravielle	0.7	35.6	22.6	24.7	8.9	6.8	–	146
Tacitus								
Gloucester	75.1	13.2	10.4	0.9	0.1	0.2	0.1	3691
Rogiet	74.9	13.9	10.2	0.6	0.5	–	–	649
25 British	83.7	10.1	5.8	0.3	–	–	–	859
N-Rentgen	49.8	30.7	13.0	5.0	1.1	0.4	–	261
Maravielle	20.4	46.5	19.0	12.7	0.7	0.7	–	142
Florian								
Gloucester	74.0	14.5	4.5	4.5	1.0	1.5	–	200
Rogiet	77.5	12.5	–	10.0	–	–	–	40
25 British	76.3	13.2	2.6	5.3	–	2.6	–	38
N-Rentgen	27.0	54.1	13.5	2.7	–	2.7	–	37
Maravielle	12.1	54.5	9.1	18.2	–	6.1	–	33
Probus								
Gloucester	70.0	14.5	11.8	3.2	0.2	0.3	<0.1	6584
Rogiet	63.9	14.9	17.5	3.3	0.1	0.2	<0.1	1339
25 British	67.9	13.2	13.2	5.2	–	0.4	–	1286
N-Rentgen	43.7	26.1	18.6	10.0	0.9	0.7	0.1	1828
Maravielle	10.7	49.6	19.3	18.9	0.4	1.2	–	694
Carus etc								
Gloucester	41.3	25.7	30.9	1.1	–	0.1	0.8	750
Rogiet	43.6	24.8	30.8	0.9	–	–	–	117
10 British	28.2	36.9	34.0	–	–	–	1.0	103
N-Rentgen	64.8	22.8	11.8	0.6	–	–	–	772
Maravielle	23.6	45.6	29.2	1.5	–	–	–	195
Diocletian and Maximian								
Gloucester	78.6	6.7	14.4	0.3	–	–	<0.1	1530
Rogiet	83.3	1.8	14.9	–	–	–	–	276
10 British	84.3	5.8	9.6	0.3	–	–	–	313
N-Rentgen	92.9	3.3	3.7	0.2	–	–	–	2660

(Gloucester figures for Tacitus, Carus and Diocletian and Maximian are provisional)

The contemporary Gloucester and Rogiet groups are on the whole remarkably consistent, though the latter is relatively strong for Ticinum coins of Probus. The comparative British hoards (as Table 5, plus Blackmoor) present a similar general pattern; but since they vary in date over nearly two decades, they differ in detail from Rogiet and Gloucester. Lyon coins of Tacitus are more dominant (even without Kirmington), for instance, but the mint is under-represented for Carus and family. The two Gallic hoards, from very different regions, differ from each other

¹³ The incorrect attribution of a number of Rome coins of Probus to Siscia by *RIC* tended previously to mask this feature.

¹⁴ Besly 2002.

considerably. Maravielle, from the very south of France, has surprisingly few Lyon coins throughout and its relationship to Cisalpine hoards has been remarked upon by Estiot.¹⁵

Many years ago, in discussing the 'clash of the coinages', Mattingly suggested that the aureliani may have been tariffed at more than twice the pre-reform coins.¹⁶ Estiot, however, has suggested that the ratio was 2:1 and this appears to be reasonable.¹⁷ The fact that, at Rome at least, Aurelian seems to have set out to produce significant numbers of a 'denarius' suggests that a functioning two-denomination system was envisaged: the portrait designs and relative weights also support a 2:1 tariff for this species. The plentiful Gallic radiates in Britain and Gaul will have fulfilled the function of the smaller piece and perhaps local preference, as much as any shortfall in official supply, saw to it that aureliani remained a minority in the currency, but readily available to those who wished to use them, for instance in trade or in travelling across the Empire. The significance of the Q-radiates in this picture will be considered below, but if they too are regarded as halves of the aureliani, the latter's numerical 66.5 per cent of the hoard equates to 80.5 per cent of the deposit's value.

The aureliani in their turn served as subsidiary coins to the nummi introduced around 294 by Diocletian's reform. They are found hoarded with the nummi in the early post-reform years and this phenomenon is observed more commonly in Gaul than in Britain. Several of the more important continental hoard groups of aureliani come from such post-reform hoards, for instance Colonne I + II and Troussey.

THE COINS: RADIATES AND AURELIANI

A. The Central and Romano-Gallic Empires to AD 274

The 123 Central Empire coins of 253–70 and 105 Romano-Gallic issues of 260–74 are too few to analyse in any detail except insofar as they bear on the nature of the Rogiet hoard, discussed in part above. They confirm that the hoard has been the subject of careful selection and many are of good weight and/or impressive flan size (see illustrated examples on **Pl. 3**). There is a relatively high proportion of Eastern issues (10 per cent), which were often more impressive in appearance, including one coin of the usurper Macrianus (70),¹⁸ whose issues are rare in Britain. The abrupt cut-off in the coins of Victorinus and the absence of Claudius's third Rome issue have been noted above. The few commemorative 'Divus Claudius' issues of c.270 are, unusually, all regular issues.

Few individual issues are sufficiently well represented for a statistical comparison with those in other hoards but where Rogiet can be compared, a consistent picture emerges (Table 7).

TABLE 7. Rogiet average weights, c.265–74, compared with Cunetio and Normanby hoards

<i>Reign</i>	<i>Issue</i>	Rogiet		Cunetio Av. wt (g)	Normanby Av. wt (g)
		number	Av. wt (g)		
Gallienus	Rome, 5	17	3.41	2.65	2.47
Claudius II	Rome, 2	10	3.52	2.79	2.73
	Rome, 4	7	3.22	2.79	2.59
Quintillus	Rome	8	3.15	2.70	2.70
Postumus	Mint I, 6	13	3.13	2.93	2.93
Victorinus	Mint I, 3b	23	3.01	2.84	2.83
	Mint II, 2	20	3.15	2.83	2.88

In every case the Rogiet sample, though admittedly very small, is of higher average weight, by between 6 and 29%, than the Cunetio figure. The fifteen coins of this period in the Maravielle hoard, assembled by around 285, seem similarly to have been selected for their good weight: and

¹⁵ Estiot 1983.

¹⁶ Mattingly 1951.

¹⁷ Estiot 1983, 37–9.

¹⁸ See 'Catalogue conventions', on p. 84.

the 54 coins of Gallienus, Salonina and Claudius II in the Gloucester hoard seem to demonstrate the same phenomenon: eighteen Rome coins of Claudius II, issue 2, average 3.68 g, for instance.¹⁹

Few coins in this portion of the hoard are of numismatic note, though attention may be drawn to a minor variation in the reverse design of no. 119. Postumus series 4a, *SALVS AVG*. Unusually, Laelian outnumbers Marius, though in a very small sample.

The 352 coins of Aurelian's reign form the first issues to be represented substantially in the Rogiet hoard. Around seventy per cent predate the 'XXI' reform of 274, but by then Aurelian had already improved the general appearance of the radiate issues. This is reflected in the considerable number of pre-reform coins from Rome, Milan and Siscia, though here too the earliest issues of these mints are all but absent and the few that are in the hoard are mostly of very good weights.

B. Aurelian and his successors: the Central Empire c.274–93

The 2,541 Central Empire coins that date from Aurelian's reform to the *decennalia* of Diocletian and Maximian form exactly two-thirds, numerically, of the Rogiet hoard, a group exceeded in Britain only by that in the great Gloucester (1960) hoard, which contained just under 13,500 comparable coins. They have been catalogued using as basic reference volume V of *The Roman Imperial Coinage* (RIC) and arranged on the basis of more recent analytical studies of specific reigns and mints. Nearly sixty per cent come from Lyon (1,660 coins) and these are listed following Bastien.²⁰ For other mints, one is now fortunate to be able to use the work of Estiot (Aurelian, Tacitus, Florian) and Gricourt (Carus *et sui*, Diocletian and Maximian) on the large La Venèra hoard from northern Italy.²¹ Only Probus lacks a modern published account, other than for the Lyon mint. For this reign, Pink's 'Aufbau' is followed (apart from Lyon), with some modification which takes into account the 6,586 coins of his reign in the Gloucester hoard, which have been studied in parallel with the Rogiet sample.²²

Lyon

The Lyon mint functioned throughout this period with four *officinae*; reverse designs are usually specific to these production units, though there are exceptions (for instance *MARS VICTOR* as a major type in two *officinae* under Probus). Issues of Aurelian and Severina, Tacitus and Florian amount to just over 500 coins. There are several rarities, for instance two specimens of B.63α (328) in issue 3 of Tacitus, and two new varieties in his seventh issue, both the result of an engraving error (352 and 358, see below). Such errors appear from time to time in the Lyon series and have been discussed in the second *Supplément* to Bastien's work. The pattern for Tacitus of alternating large and small issues, observed elsewhere (e.g. Blackmoor, Tattershall Thorpe, La Venèra) is also apparent here.

The 856 Lyon coins of Probus in Rogiet and the 4,609 from the Gloucester hoard provide the best single-source samples for this reign. Many 'type specimens' cited by Bastien as 'BM' derive in fact from Gloucester: the British Museum acquired in 1962 a sample of 1,433 coins from this large hoard, the remainder of which went to Gloucester Museum. Bastien therefore had access to less than one-tenth of the Gloucester coins (though the British Museum had attempted to acquire examples of all varieties). Study of the Gloucester coins of Probus, towards a proposed new catalogue, in parallel with those in Rogiet, gives perhaps a better idea of the relative numbers and significance of the various issues than is possible on the basis of museum collections (Table 8).

The Lyon coins of Probus are here catalogued according to the nine sequential issues identified by Bastien. The first of these comprises distinctive coins with the 'long' obverse *IMP C M AVR PROBUS AVG* and a Florian-like portrait, using the reverse types of Florian's last issue (e.g.

¹⁹ Information taken from draft list by R. Abdy.

²⁰ Bastien 1972, 1976; Bastien, Amandry and Gautier 1989; Amandry, Estiot and Gautier 2003.

²¹ Estiot 1987, 1995; Gricourt 2000a. Estiot's (2004) magnificent catalogue of coins in the Bibliothèque nationale de France was not published in time to be useful in listing Rogiet. However, a few catalogue footnotes refer to this, as 'BnF'.

²² Pink 1949

TABLE 8. Distribution of Lyon issues of Probus in hoards and collections

Issue	Rogiet	%	Gloucester	%	5 French*	%	Bastien†	%
1	19	2.2	100	2.2	10	2.0	69	3.0
2-3	163	19.0	908	19.7	64	12.9	354	15.3
4	240	28.0	1268	27.5	117	23.5	298	12.9
5	15	1.8	56	1.2	13	2.6	259	11.2
6	128	15.0	584	12.7	74	14.9	383	16.5
7	7	0.8	31	0.7	20	4.0	106	4.6
8	40	4.7	246	5.3	97	19.5	336	14.5
9	244	28.5	1414	30.7	102	20.5	512	22.1
Totals	856		4607		497		2317	

*Authieux, Colonne, Maravielle, Ste-Pallaye, Troussey.

†Bastien, as n. 20.

447-9).²³ Issue 2 introduces new reverses, some of which then continue through issue 3 to issue 4. Those coins of issues 2 and 3 that share the same reverse types are distinguished from each other by the evolution of the emperor's effigy into one that is distinctively 'Probus' (e.g. 459/1, 463/9). Issue 4 comprises coins with a shortened obverse legend, IMP C PROBVS-P-F-AVG.

These 'issues' form a convenient way of listing the coins, but in practice things were probably not so clear-cut. Rogiet and Gloucester provide some new evidence that might suggest a more fluid situation, as the portraits and obverse legends evolved – i.e., as new batches of dies were cut and then put into use. Rogiet has added a new variety to issue 4: no. 464, with reverse ORIENS AVG, in officina I. This coin is a mule between issues 4 and 2. A second type in the same issue, SECVRITAS ORBIS (B.185), is also a 4/2 mule; and this reverse also reappears as a 6/2 mule (B.263, Gloucester hoard). Both of these reverse types have previously been attributed to issue 2, but not issue 3. However, it is apparent that ORIENS AVG certainly continued into issue 3, for there are examples that show the same evolution of the emperor's portrait as the other issue 3 types (e.g., Rogiet 451/5). It is in any case not always easy to distinguish coins of issue 2 from those of issue 3, since this depends upon perception of style where the style is evolving. Is the new mule evidence for this type continuing into issue 4, or should this be regarded simply as an example of the survival of an obsolete reverse die? Alternatively, does this evidence bring the issues closer together in time, even overlapping? (B.176α is another mule, this time with a later reverse, combining the short form TEMPOR FELICI of issue 4 with a 'long' obverse attributable to issue 3.)²⁴ There are portraits on issue 4 dies that are very similar to those of issue 3: did the use of the shorter obverse legends overlap with the longer? In the next large issue (6) both long and short obverse legends are used; this may also have been the case in an evolving issue 2-3-4. In passing, we may note that of the handful of British hoards closing with coins of Probus several end with issue 4, but none earlier, as far as Lyon is concerned.

Down to issue 4, obverse busts are cuirassed, viewed from the front (the sole exception being B.177/179bis, which perhaps belongs to issue 6). In issue 6, the cuirass takes on a new form and draped busts, viewed from the rear, become a significant element. The form of the 'early' cuirass of issues 1-4 is not often clear, since the truncation is almost always cut off short; the cuirass of issue 6 and later coins is clearly a form of chain mail.

A similar duality may be observed on the obverse busts of issue 5, a series of coins with exceptional obverses that Bastien saw as a short, special issue – intended as a *donativum* – around the end of 277; it accounts for over 11 per cent of the aureliani recorded in Bastien's survey. In hoards, however, this issue – like issue 7 – is consistently rare and dwarfed by those either side, though both do appear to be a little more significant in French hoards. The occasion for the issue was no doubt the *Adventus* recorded on its single gold type and on aureliani, both with the

²³ The extended obverse legend including the new emperor's *praenomina* and a portrait resembling his predecessor are found elsewhere in the Roman coinage: see, for instance, the opening issues of the Romano-Gallic emperors Postumus and Victorinus (Besly and Bland 1983, 44, 62).

²⁴ Bastien, Amandry and Gauer 1989, 14-15; Gricourt 1983, 324-5.

ceremonial busts (e.g. 473) and the conventional obverses of issue 4. The reverses are those of issues 4 and 6. Special busts have also been noted in other issues: 6 (B.290 α), 7? (B.340 β), 8 (B.339–40; 340 α ; 341) and 9 (B. 372, 272 α). The obverse die of B.290 α is that of B.239b in issue 5 and this coin has been interpreted as an obverse die re-used in a subsequent issue that otherwise lacked the special busts.²⁵ There is, perhaps, some evidence that other special busts may indeed have been used during issue 6, in that some of the 'issue 5' busts appear to share characteristics of the obverses of issue 6. Most of those with the bust viewed from the front bear a cuirass in the form of a solid breastplate ('1', e.g. 475/1, 478/2), which may be similar to that of issue 4 (see, for instance, 466/1); on others we see the 'chain mail' of issue 6 ('2', e.g. Rogiet 483), with most reverse types associated with both forms. Others, viewed from the rear, are draped (484), or almost always have the 'chain mail' form of cuirass (479) – characteristics of issue 6. The occurrence of these varieties is summarized in Table 9, which combines the coins illustrated in Bastien and supplements with the Rogiet and Gloucester examples.

TABLE 9. Bust types on coins of Lyon, issue 5 (numbers of specimens)

Type	<i>Busts with cuirass type 1</i>		<i>Busts with cuirass type 2</i>		<i>Other busts*</i>
	<i>Front</i>	<i>Rear</i>	<i>Front</i>	<i>Rear</i>	<i>Rear</i>
ADVENTVSI, III, IIII	12	–	–	–	–
TEMPOR FELICI, I	38	2	2	13	9
MARS VICTOR, II	36	–	5	–	12
FIDES MILITVM, III	24	–	–	–	5
MARS VICTOR, III	24	–	1	1	9
ABVNDANTIA AVG, IIII	20	–	–	2	6
VIRTVS AVG, IIII	7	–	6	5	–
Totals	161	2	14	21	41
	163		35		41

*Excluding consular.

While this comparison is only semi-quantitative, it appears to demonstrate that some of the issue 5 coins may have been contemporaneous with those of issue 6. Coins with the first cuirass type are roughly twice as common as the combined total of those with the second and with draped busts viewed from the rear. This in broad terms parallels the relative numbers of coins from issues 4 and 6 in Rogiet, Gloucester and other smaller hoards. The one type where specimens with the second version of the cuirass outnumber those with the first is *VIRTVS AVG* in officina IIII – a type that postdates issue 4. The relative numbers suggest an issue using special obverses during the course of issue 4, with perhaps a second such issue during the course of issue 6. Coins with special busts may have been produced fairly continuously, but usually in small numbers, from the time of issue 4 onwards. This pattern appears to parallel that at Ticinum (see below).

One minor adjustment to the corpus of Lyon issues of Probus concerns the type *FIDES MILITVM*, of which three specimens have been published with signature - - // II : B.177 in issue 3 (or 6?) and B.189, 189b in issue 4. The first appears from its illustration to show traces of a third 'I' and its likelihood of belonging to officina III is increased by its obverse die link to B.179bis (*FIDES MILITVM*, - - // III). B.189, a British Museum coin from the Gloucester hoard, is certainly from officina III and B.189b, following re-examination, is also likely to read 'III'.²⁶ These three specimens should be deleted: examination of 440 coins with this reverse type in the Rogiet and Gloucester hoards has failed to find any reading 'II' and it appears that it was confined to officina III.

In the final (ninth) Lyon issue of Probus, two versions of the type *Spes* have been noted in officina C. I have described these as 'walking' (*Spes* I, e.g. 527) and 'standing' (*Spes* Ia, e.g. 523); they are probably intended to be the same design, perhaps as interpreted by different die-cutters. A similar pairing has been observed in the *SPES PVBLICA* type of Tetricus I and II²⁷ and this

²⁵ Amandry, Estiot and Gautier 2003, 40.

²⁶ Readings of B.177 and 189b confirmed by M. Amandry and S. Estiot, *in litt.*, October 2004.

²⁷ Bland 1982, 8, 97 n. 184.

may represent continuity of personnel from the time of the Romano-Gallic state. However, the intervening extensive SPES PVBLICA issues of Tacitus (issues 3–4, 7–8) appear to be almost exclusively of the ‘walking’ type (e.g. 334/2).

The 51 Lyon coins of Carus *et sui* and the 230 of Diocletian and Maximian are less susceptible to detailed analysis. The Lyon series of the latter ends fairly weakly, as might be expected in the light of the establishment of the breakaway ‘British’ state of Carausius and Allectus, with one example of the eighth issue and two of the tenth (AD 293), and lacking coins of the new Caesars of that year, Constantius and Galerius.

The Rogiet hoard has produced a good group of new varieties and rarities from Lyon. Fifteen of these have been published as a contribution towards the next supplement to Bastien’s *Corpus*.²⁸ A sixteenth, overlooked at first, and one further rarity noted in the first *Supplément*, are also listed here.

Tacitus

328. Issue 3, SPES PVBLICA, – // CA ; *Sup. I*, B.63α, showing clearly the obverse punctuation IMP-CL-TACITVS-AVG; two specimens.

352. Issue 7, a variant of B.101, reverse FELICITAS SAECILI, C * // - ; a different reverse die from the specimens of B.102 with a similar engraving error.

358. Issue 7, a variant of B.100, reading MARS VCITOR, B * // - .

Probus

464. Issue 4, mule with reverse ORIENS AVG, – // I ; discussed above.

473. Issue 5, ADVENTVS PROBI AVG, – // I ; obv. H41; same dies as *Sup. II*, B.202α.

482. Issue 5, MARS VICTOR, – // III ; obv. G1; *Sup. II*, B.244α, same dies (Ste-Pallaye 2294).

501. Issue 6, VIRTVS AVG, – // IIII ; obv. B2; same obverse die as B.300 and Ste-Pallaye 3017, with punctuated legend.

519. Issue 9, SALVS AVG, – B // - ; obv. IMP C M AVR PROBVS P F AVG, D2; *Sup. II*, B.391α; same obverse die as B.391αa, different reverse die.

522. Issue 9, SALVS AVG, – B (reversed) // - ; obv. IMP C M AVR PROBVS AVG, D2; same reverse die as B.400–1.

Carus

807. Issue 2, VICTORIA AVG, A - // - ; corrects B.455bis; from the same obverse die, which is punctuated P-F-AVG.

Diocletian

881. Issue 1a, PROVIDENTI AVG, – C // - ; cf. B.15, engraving error.

900. Issue 2/3: hybrid reverse IOVI CONSERVAT AVGG, A - // - , as issue 2, but with an eagle at Jupiter’s feet to left, as coins of issue 3 that read IOVI CONSER AVGG.

921. Issue 7, SALVS AVGG, – // C ; obv. B31; *Sup. I*, B.396α; same obverse die as the three other recorded examples.

929. Issue 7, SECVRIT PERP, – // A ; *Sup. I*, B.347α, same dies.

932. Issue 7, SECVRIT PERP, – // C ; *Sup. II*, B.417α; same reverse die as B.417α, 417β.

Maximian

909. Issue 4, HERCVLI PACIFERO, B - // SML ; obv. B1, bust variant.

933. Issue 7, SALVS AVGG, – // C ; obv. IMP MAXIMIAVS P F AVG, K51; obverse engraving error and variant bust/legend combination.

Rome

There are 347 aureliani and 7 denarii from the Rome mint in the Rogiet hoard. The denarii, all of Aurelian (two: 192) and Severina (five: 185, 193–4) appear at first sight to form an insignificant group, but this changes if they are viewed in the context of the ‘reformed’ coins of that reign. From Rome, there are twenty-six coins of issues 8–11, the denarii therefore forming over a quarter of them, or around one-sixth by value if reckoned as half-aureliani. Table 10 summarises Aurelian’s reformed Rome issues in hoards from Britain and France that contain them and appears to demonstrate that this pattern is common to finds from Britain and Gaul, with the exception of the ‘cisalpine’ Maravielle which, like La Venèra, virtually excludes them. The denarii seem to have been intended, at the time, as a significant issue, but found more favour, at least in hoards, in the north-western areas where the unreformed radiates still played an important part.²⁹

²⁸ Besly 2003.

²⁹ The denarii are very rare as archaeological site finds; for an example from Cavillargues (Gard, France) see Alix and Lempereur 2005, 52–5, who also cite two further examples from sites in the Alpine region.

TABLE 10. Aurelian, Rome issues 8–11 in hoards

	<i>aureliani</i>	<i>denarii</i>	<i>total</i>	<i>den %</i>	<i>den value%</i>
Rogiet	19	7	26	26.9	15.5
Gloucester	125	54	179	30.1	17.8
11 British hoards*	14	11	25	44.0	28.2
Nieder-Rentgen	49	22	71	31.0	18.3
9 French hoards†	34	21	55	38.2	23.6
Maravielle	49	3	52	5.8	3.0
La Venèra	760	26	786	3.3	1.7

* Bath, Blackmoor, Coleby, East Harnham, Linchmere, Maltby, Monkton Farleigh, Much Wenlock, Normanby, Penard, Tattershall Thorpe.

† Les Authieux, Brains-sur-les-Marches, Colonne I+II, Fresnoy-lès-Roye I+II, Montbuoy, Montereau, St Maurice, Ste-Pallaye, Troussey.

The relative volumes of Rome issues under Probus have been discussed by Estiot³⁰ and the Rogiet and Gloucester figures confirm that Pink's issue 6 was far and away the largest, followed by issue 1; and that issue 2 was certainly the smallest. Between these in size were four other issues which appear to have been broadly similar, the ranking of which within any single hoard varies (Table 11).³¹

TABLE 11. Probus, Rome – ranking of issues

<i>Issue:</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>Total</i>
<i>Coins, %</i>								
Rogiet	25.8	3.5	8.1	4.5	12.6	38.9	6.6	198
Gloucester	31.7	1.8	7.0	8.5	8.8	37.2	4.8	941
Nieder-Rentgen	10.1	3.4	6.6	11.6	5.8	50.1	12.4	467
Maravielle	10.8	2.9	5.8	9.9	6.7	55.5	8.4	344
La Venèra	12.4	4.4	8.9	11.1	5.6	46.7	10.7	4870
<i>Ranking</i>								
Rogiet	2	7	4	6	3	1	5	
Gloucester	2	7	5	4	3	1	6	
Nieder-Rentgen	4	7	5	3	6	1	2	
Maravielle	2	7	6	3	5	1	4	
La Venèra	2	7	5	3	6	1	4	

The figures for Nieder-Rentgen, Maravielle and La Venèra are those of Estiot, as n. 21.

The affinities of Rogiet/Gloucester and Maravielle/La Venèra and their differences from each other are again apparent, with Nieder-Rentgen differing from both. With so few sufficiently large hoards to compare, it is unclear whether these differences are regional (for instance, for issues 4 and 5) or relate to quirks in the compositions of the individual deposits. However, six British hoards of the 280s–290s that between them contain 134 Rome coins of Probus show the same basic ranking of issues as Rogiet and Gloucester, though with effectively equal numbers of coins from issues 3, 4 and 5.³²

There are in Rogiet few Rome coins that are not recorded by *RIC*/Estiot/Gricourt, though several *RIC* variants of Probus may be noted in issues 2 and 3. Some other apparent Rome variants seem to derive from misprints in *RIC*. The hoard also contains one specimen in the name of Divus Nigrinianus, infant son of Carinus (854).³³ Coins in his name are extremely rare in Britain, presumably because of the inherent scarcity of Rome coins of the period in British finds. One other appears to have been recorded, perhaps inevitably from the Gloucester hoard.

³⁰ Estiot 1983, 51–2.

³¹ Numerical ranking of the issues provides a very simple visual comparison, regardless of the size of the hoards.

³² Blackmoor, E. Harnham, Linchmere, Monkton Farleigh, Normanby and Somerset

³³ Gricourt 2000b.

Ticinum

The Ticinum (present-day Pavia, northern Italy) mint is well represented in Rogiet throughout, notably in the 234 coins of Probus which make this the second largest mint group for the reign. Again, parallel study of the 779 Ticinum coins of Probus in Gloucester has been of assistance. The catalogue follows the arrangement in ten issues published by Pink, both to facilitate comparison with previous publications and because at the time of writing a definitive study of the coinage of Probus is still awaited.³⁴ A few comments and suggested modifications may, however, be made regarding issues 3–5. The coins of issue 3 are some of Probus's most spectacular and imposing aureliani, both in their depiction of the emperor and in the use of larger dies. As measured using the diameter of the pelleted outer circle, the study of die diameter as an adjunct to classification has been used elsewhere to good effect, for instance in the London (- - // PLN) nummi of the second and third tetrarchies after AD 306.³⁵ It appears that this is also of value here. As at Lyon, there is a small initial issue, followed by a new set of 'major' reverses used for a considerable period. Within these is an issue using special busts – issue 3, relatively much larger than the parallel series at Lyon; and an issue with shorter obverse legends – issue 4. The basic die module of issue 1 is 20 mm; of issue 2, 20–21 mm; and of issue 3, 21 mm (very occasionally, 22mm). It may be noted in passing that increasing the diameter by 5 per cent enlarges the area usable for the design and legend by 10 per cent. In issue 3 there are two series, using obverse legends IMP C M AVR PROBVS AVG and VIRTVS PROBI AVG. During the course of issue 4 the die module reverts to 20 mm, which is retained for the remainder of the reign.

Various writers have noted the occurrence of small numbers of Ticinum aureliani with punctuated obverse legends and these do appear to form a coherent group, with coins recorded from every *officina*.³⁶ Some dies are punctuated both before and after the emperor's name: IMP·C·PROBVS·P·F·AVG (e.g., 682–3), others only after it (684–7). Their die module is invariably 21 mm and so it would seem that these might have formed the very first issues using the shorter obverse legend IMP C PROBVS P F AVG, the punctuation compensating on the larger module dies for the loss of two characters in the legend. They have therefore been catalogued as a first phase of the fourth issue, together with one coin from an unpunctuated 21 mm obverse (688).³⁷ (One punctuated obverse in the Gloucester hoard retains a longer form IMP C M AVR PROBVS·P·F·AVG.)³⁸ A very small number of coins with longer obverse legends (M AVR – P F AVG, M AVR – AVG) appear, on their die modules, lettering and bust styles, to belong to the second phase of issue 4 (e.g. Rogiet 689 and several coins in Gloucester).

Coins of Pink's fifth issue, which combines existing reverses from issue 4 with obverses IMP C PROBVS AVG, appear to be very rare indeed: there is one in Rogiet (704) and one in Gloucester. They might perhaps be viewed as mules between issues 4 and 6. The signature 'AEQVITI', added to the last issue at Rome, also appears at Ticinum from issue 7, adjusted to fit Ticinum's six-*officina* operation: 'EQVITI' (issues 8–10) appears to have been adopted fairly rapidly, following an experiment with 'AEQVIT' (issue 7, 722).³⁹

There is a steady series of VIRTVS PROBI AVG obverses with armoured and other special busts in every issue from the third onwards. In addition, successive consulships are indicated specifically in obverse legends terminating II, III or IIII.

The ranking of Ticinum issues of Probus may be compared in a similar manner to Rome's (Table 12), again using figures from Estiot for Nieder-Rentgen, Maravielle and La Venèra.⁴⁰

³⁴ A catalogue of the coins of Probus in the Paris and Vienna collections, in preparation by Sylviane Estiot.

³⁵ Stewartby 1996.

³⁶ A rapid survey of specimens and literature accessible to the writer produced 84 examples and many more no doubt survive.

³⁷ As is the case with Lyon, these 'issues' form a convenient way of cataloguing an evolving coinage in which certain elements remain constant (the reverses). Estiot (*in lit.*, June 2005) suggests – for instance – that these '21 mm' coins with shortened legends form part of issue 3.

³⁸ RIC 347, CONSERVAT AVG, - - // TXXT; obv, K41 (BM).

³⁹ The 'hypercorrection' – 'AE' for 'E' – in the word *equitum* (of the cavalry) also appears on coins struck at Milan (precursor of Ticinum) in the name of Postumus, in AD 268. These and other 'ae' for 'e' hypercorrections are discussed by Kent 1973, 66.

⁴⁰ Estiot 1983.

TABLE 12. Probus, Ticinum – ranking of issues

Issue: Coins, %	1	2	3	4	5	6	7	8	9	10	Total
Rogiet	2.6	20.9	9.0	13.7	0.4	11.1	0.4	2.6	29.9	9.4	234
Gloucester	1.7	29.9	8.5	16.6	0.1	17.5	0.4	1.5	18.6	5.3	779
Nieder-Rentgen	-	5.6	11.2	12.9	0.3	7.8	0.3	1.4	45.0	15.4	357
Maravielle	0.7	9.7	7.5	29.1	-	16.4	-	-	20.1	16.4	134
La Venèra	0.6	12.7	10.8	15.6	0.4	15.5	0.6	1.2	26.5	16.2	3632
Ranking											
Rogiet	=7	2	6	3	=9	4	=9	=7	1	5	
Gloucester	7	1	5	4	10	3	9	8	2	6	
Nieder-Rentgen	10	6	4	3	=8	5	=8	7	1	2	
Maravielle	7	5	6	1	=8	=3	=8	=8	2	=3	
La Venèra	9	5	6	3	10	4	8	7	1	2	

While the four smallest issues (1, 5, 7 and 8) are consistently so, there are again differences between the Rogiet/Gloucester pattern, where issue 2 is unusually prominent, and the three continental examples.⁴¹ A collective summary for British hoards, as for Rome above, could not be made on information currently available.

Siscia and other mints

With the correct attribution of some early types of Probus to Rome, it is clear that Siscian issues play a much less prominent part in western hoards than used apparently to be thought, in Rogiet supplying 66 coins, or 2.6 per cent of the aureliani in the hoard. One coin of Probus, no. 767, from issue 4 (VIRTVS PROBI AVG trophy, - // XXIT), may be remarked as an unusual variety, on which the emperor is depicted radiate and cuirassed to the left, holding in his right hand the *pugio*, or eagle-headed ceremonial dagger (Fig. 2). The *pugio* appears on the coinage in the third and fourth centuries, principally on multiples and medallions, and its iconography has been discussed by Bastien.⁴² The new coin from Rogiet appears to be similar to a Siscia coin of the seventh issue illustrated by Bastien (pl. 119, 3; CONCORD MILIT, T // XXI), on which the emperor is helmeted – apparently the only other depiction where the dagger is held in the right hand; and each of these has a counterpart in the same issue and *officina* with a right-facing bust holding the *pugio* in the left hand (B., pl. 123, 8 and pl. 120, 2).⁴³



Fig 2. Probus, Rogiet 767 (scale 2:1).

⁴¹ If the '21 mm' coins of issue 4 are attributed to issue 3, the early bias in Rogiet is emphasized, with issue 3 rising to third place (13.2%); similarly, issue 3 for Gloucester rises to fourth-ranked (13.6%) (A similar exercise for the other three hoards could not be carried out on the information available.)

⁴² Bastien 1992, 1993, 1994.

⁴³ I am now (June 2005) indebted to Sylviane Estiot for details of Siscian 'pugio' aureliani in her records: a total of twenty-five coins, with four varieties of obverse, fourteen of them from *officina* T. Rogiet 767 is otherwise unrecorded, but Estiot has noted fourteen specimens with this version of the bust, from three *officinae* (T, 7; Q, 4; V, 3).

There are several other coins from Siscia (Tacitus, 420–2; Florian, 443–4; Probus, 763–4, 777–8, 799) and Serdica (Tacitus, 423–5; Probus, 800) which appear to be variants not noted in *RIC*, mostly observed since by Estiot, or Pink. Most of these are illustrated.

C. The 'British' Empire: Carausius and Allectus

The Rogiet hoard includes twenty-four coins from the reign of the usurper Carausius (in Britain, c.287–93) and three aureliani of his successor Allectus (293–5/6), together with 757 of the 'quinarii' or Q-radiates of the latter, which will be described separately.⁴⁴ Of the Carausian issues, eight belong to the late series in the names of Diocletian and Maximian or bearing their portraits. One, of Maximian (1002), is an obverse brockage, but plainly a London coin.

With only three exceptions, the coins of Carausius are mint-signed (L for London; C – or G – as yet unlocated) and the unsigned coins are effectively aureliani in terms of their weights and modules. The crude early radiates and issues attributed to Rouen are not represented. There are several noteworthy coins, unrecorded by *RIC*, involving variant obverse or reverse legends (991–2, 994) and one completely new reverse type, no. 998, in the name of Diocletian, with his trademark 'Iovi Conservatori' adapted to the three-emperors format. A further specimen of no. 1003 (Diocletian/MONETA AVGGG; S P // C) has since appeared in the Langtoft A hoard in 2000, from the same pair of dies.

Number 1005 proved, after conservation, to be one of the very finest specimens of the rare 'three emperors' series of c.293, with obverse 'CARAVSIVS ET FRATRES SVI' ('Carausius and his brothers') and reverse VICTORIA AGGG (*sic*). Victory running to right. This precise Victory type was known to Carson from a very worn specimen in the British Museum, apparently from different dies.⁴⁵ The present example shares the same obverse die as Carson's no. 2, which has the same reverse design, but with the legend COMES AVGGG. A second specimen from the same dies as 1005 was offered at auction in 1996.⁴⁶

Two Carausian coins were overstruck on identifiable prototypes: nos 985, on a Rome coin of Gallienus, and 987, on a Lyon issue of Tacitus. On no. 983, another *RIC* variant, there are clear traces on the reverse of lightly-engraved setting-out marks for the positioning of the legend and the wing of the figure of Victory.

The three aureliani of Allectus (1006–8) provide two *RIC* variants from the C mint, one of them known to Burnett,⁴⁷ and a single coin from London, which bears the first (S P // ML) of three marks used at London during the reign. The two C mint coins both belong to the S P // C series, a mark used for most of the reign. The very small number of aureliani of Allectus may suggest a terminus relatively early in his reign, were it not for the large number of Q-radiates, which hitherto have generally been thought to belong at its end, mainly because they are so scarce in hoards – at least, until the finding of Rogiet. These coins will be discussed in the next section.

D. Counterfeits

The Rogiet hoard contains eleven irregular coins, numerically forming 0.28 per cent of the deposit. This is of a piece with the nature of Rogiet, a carefully selected hoard. Nine of these coins are well-silvered copies of prototypes of 260–71. An imitation of Gordian III (1049) is a cast piece of similar module and weight to the aureliani. The sole counterfeit aurelianus (1057) copies a Rome issue of Tacitus, and comes from the same pair of dies as two specimens in the Venèra hoard. In general, counterfeits of aureliani appear to be distinctly scarce: among 6,586 coins of Probus in the Gloucester hoard, just two (0.03%) are irregular, one of them a cast.

⁴⁴ For the dates, see Casey 1994, Chapter 3, who for Allectus follows ideas first aired by Burnett 1984.

⁴⁵ Carson 1982.

⁴⁶ Classical Numismatic Group, Inc., Auction 39, 18 September 1996, 1687.

⁴⁷ Burnett 1984.

THE COINS: Q-RADIATES OF ALLECTUS

Introduction

In addition to its unusual concentration of aureliani, the Rogiet hoard contains 757 examples of the enigmatic Q-radiates ('quinarii') of Allectus; these, together with three of his aureliani, form the latest element of the hoard, since none of the coins of Diocletian and Maximian can be dated later than 293. Hoards containing significant numbers of Q-radiates are few and far between: since 1850, only Blackmoor (1873) has contained fifty or more, though the 70 or so formed less than 0.3 per cent of the whole. Hoards from Bitterne and Old Ford may have consisted entirely of Q-radiates, but no detailed records survive. Elsewhere, Ewelme (1953) included 20 Q-radiates in a hoard of 202 coins; otherwise, these coins appear only in ones and twos. Many surviving specimens are single finds from archaeological excavations or chance discovery and are usually fairly poorly preserved and not suited to intensive numismatic study. Rogiet therefore provides a unique opportunity to examine and study a significant group of Q-radiates.

The most recent consideration of the Q-radiates came as part of a paper on the coinage of Allectus by Andrew Burnett, delivered at a colloquium in London in 1984, and published in the *British Numismatic Journal*.⁴⁸ Several questions regarding these coins have remained unanswered over the years: when were they struck? What was their relationship with the aureliani? Were they a response to Diocletian's reform? Like Burnett, I am not sure that these can be answered definitively, but the Rogiet coins permit us to gain new insights into the structure of this issue and the minting techniques of the 'British' empire. We must bear in mind that in the absence of useful comparative groups, any conclusions drawn can only be provisional, since they depend upon the evidence provided by a single deposit, and further work will be needed.⁴⁹ Likewise, the time scale – imposed by the duration of Allectus's reign – is, in any case, fairly short.

Q-radiates

In brief, the Q-radiates are coins of Allectus characterised by weights averaging around three grams, which bear a portrait of the emperor wearing a rayed crown, as appears on the radiates and aureliani of the third century. Their reverses bear depictions of various ships, the large majority a stylised war galley. There are two series, marked respectively QL and QC, the first attributed to London, the second to a separate mint, the location of which remains uncertain.⁵⁰ (The question is raised from time to time as to whether or not these represent more than one mint, but as will be seen, the Rogiet Q-radiates strongly suggest two establishments.)

The commonest variety is the same for both mints:

Obverse: IMP C ALLECTVS P F AVG; bust B1⁵¹

Reverse: VIRTVS AVG; galley with mast and ram, to left; -- // Q(L or C)

Die diameters, measured across the pelleted borders, are typically 18–19 mm.

For London, there is a single obverse legend but there are variant busts, D1, D2 and, exceptionally, G11 (not represented in Rogiet; a single die? **Pl. 25, A**).⁵²

At 'C', the obverse bust is almost invariably B1, rarely D1 (**Pl. 25, B**),⁵³ but there are several obverse legend varieties, with suffixes ~ P AVG and ~ AVG (both relatively common); also, in small numbers, ~ P FEL AVG, ~ PI FE AVG and ~ P F I AVG.⁵⁴ Very occasional dies read IMP ALLECTVS ~.

⁴⁸ Burnett 1984.

⁴⁹ And, in an ideal world, some further hoards, for comparative study to set against the framework outlined here: we cannot know from Rogiet alone what stage of the QC/QL issue had been reached when this sample was assembled.

⁵⁰ Lloyd 1998. Lloyd detected, but inconclusively, a westerly bias for the finds of C mint coins. Williams 2004, 40–5, also discusses the location of the mints, equally inconclusively, though with a leaning towards a centralized operation.

⁵¹ See key to obverse busts, on pp. 80–1.

⁵² Robertson 1978, 284, no. 35 (here **Pl. 25, A**); Burnett 1984, 28, 34, no. 109. Others, Classical Numismatic Group, Inc. Auction 38, 6 June 1996, 1132 (same dies); CNG Auction 53, 15 March 2000, 1713 (same obverse die).

⁵³ I have encountered two specimens with D1 busts (Burnett 1984, 36, no. 218): in the Hunter Collection, Robertson 1978, 287 no. 64 (type €? – see below, ~ P F AVG: **Pl. 25, B**) and the Fitzwilliam Museum, Henderson bequest 3112 (type γ?, ~ AVG).

⁵⁴ For 'Pius Felix Invictus'.

Small numbers of variant reverse types occur at both mints. London coins include galleys without masts and some exceptional light craft. Vessels may face left or right. Very rarely a figure of Victory or a river-god is depicted on board. The vessels at 'C' are more consistent, but again a figure of Victory or of Virtus sometimes replaces or stands on the stem; other occasional addenda include a bird at the masthead or a decorated prow. Some of the galley designs appear to evolve from coins of Carausius; one London type appears to be a direct copy of a coin of Postumus.

There is also a second reverse type, which was produced only at 'C': LAETITIA AVG, galley to left or (mainly) right – vessels of different forms from the *Virtus* examples. This occurs with a similar range of obverse legends, again with B1 busts. A further question to be considered is, therefore, the relationship of the *Laetitia* coins to the *Virtus* series.

Like the heavier aureliani, the Q-radiates are essentially copper-alloy coins, with a thin silver coating – a feature that has perhaps hitherto not been obvious, since the vast majority encountered are heavily patinated or corroded. The Rogiet coins, which include one or more uncirculated batches from the C mint, certainly appeared silvery when issued, but as with the aureliani of both Carausius and Allectus, this silvering was very thin and fugitive. In this aspect the silvering of the 'C' coins appears generally to be more substantial than the London examples and the former are for the most part better preserved. There are some coins of both series, presumably those scattered by repeated ploughing, that are badly corroded.

An attempt has been made in studying the Rogiet coins to classify the dies of both mints according to varieties of both design and die-cutting techniques. For the London series, as many die-links have been sought as possible, but more coins are poorly preserved and many of the dies (particularly the obverses) show signs of heavier use than their 'C' counterparts and this part of the study must be regarded as incomplete. For the C mint, however, die study has been aided by generally good preservation, the existence of the two reverse types, varied obverse legends and remarkably consistent die-cutting. Here, we can be reasonably confident that a full die study has been carried out. The full classification of the 749 Q-radiates acquired by NMW is given as Appendix B.

London: obverses

Examination of die-cutting elements such as hair, beard, wreath-ties and others suggests that there are four main treatments of the imperial portrait (see Fig. 3).

A: A rounded head, with hair brushed forwards at forehead, backwards at temple: a naturalistic treatment which sometimes gives a slightly dishevelled appearance. The beard is basically brushed forwards, with small clusters formed by triple strokes from a fine engraving tool. Ties are ribbons of different lengths, both bent to the rear. For the B1 busts, there are usually indications of an undergarment ('vest') beneath the cuirass. Nearly two-thirds (22 out of 36) of the dies cut in this manner are associated with draped busts. Examples 3026, 3055.⁵⁵

B: A head with craggier features, with hair neat and brushed forward. The beard is brushed downwards, well-defined but with a lumpy appearance. The ties may be ribbons or have a string-like appearance. (Approximately 63 dies in Rogiet; example 3085.)

C: A squarer, more angular head, with prominent forehead and hair brushed forward and short, forward at the temple. The beard is brushed forwards and down, consisting of very fine, short strokes. The ties are string-like, one bent to the rear, the other bent forwards across the neck. Apparently not found with draped busts. (Approximately 43 dies; examples 3277, 3281.)

D: A narrower head with a curved forehead and hair brushed forwards. The beard is brushed forwards, comprising paired strokes of the engraving tool. Ties are ribbons, short and bent to the rear. There may be indications of a 'vest'. This variety is not found with draped busts. (Approximately 68 dies; examples 3217, 3223, 3246.)

⁵⁵ See 'Catalogue conventions', on p. 84.



Fig. 3. QL: the four principal obverse treatments.

Groups A, C and D seem to be consistent, though there is a small group of obverses, designated C', comprising heads similar to C but with ties as ribbons, bent to the rear (eleven dies; examples 3173–4) (Fig. 4). This group includes a number of dies of small diameter (17 mm), two of them with draped busts (3033–4). Occasional busts with the hair brushed sideways at the forehead seem mainly to belong with type B and are designated B' (examples 3049, 3122, 3270); one type C die shows hair brushed sideways (3136).

There are small numbers of other treatments, including heads, some large (e.g. 3126), with very neat hair and beards and ties comprising curved or straight 'strings'. These features, from their combinations with others of type B, may be varieties of B, but this is not certain (here, B'', e.g. 3273). There are also dies that appear to show features of more than one of the groups, e.g., A with fine beard similar to C (3025) as well as the odd peculiarity (e.g. 3100) indicative, perhaps, of dies that have been re-engraved.

With all due caution, it may be suggested that A and C represent the work of individual engravers. Type D may represent a development of A, working in a simplified manner. The dies of group B are less consistent: they may involve more than one die-cutter, working in very similar manners, but a definitive classification has so far proved elusive.



Fig. 4. QL: variant obverse treatments.

London: reverses

The principal reverse type comprises a war galley sailing to the left as viewed. It has a mast, a ram and prominent stem- and stern-posts, the latter usually curving over a stern cabin. There is a steering oar (occasionally, two; sometimes absent) and varying numbers of oars, depicted raked forward, at the start of the stroke; pellets often indicate the heads of the rowers or crew. Waves are normally indicated below.

Within this general design there appear to be three principal treatments (Fig. 5):

1: A solid galley, with a prow resembling a reversed £-sign with the lines of the vessel protruding beyond the stem-post. Decoration of the 'oarbox' – the boxlike structure running the length of the vessel above the oars – varies. The mast stays are often doubled, and there is a pellet at the masthead. Usually 7–9 oars, often doubled; 0–6 crew, sometimes armed. Waves are single, curled as shallow S-shapes, four or more.

2: A galley with prominent slim curved stem- and stern-posts. Oarbox usually *////*, but there are other variants. Stays single, occasionally with indication of furled sails(?), pointed finial to masthead. Oars, 5–8; crew, 0 (often) or 4–6, armed on one die; waves, single.

3: Galley with stem springing from the deck, sometimes decorated. Oarbox usually **. Oars, 4–8.

Within this group are three main variants:

3a: generally crudely engraved; stays doubled, plain stern; waves normally doubled (three crests).

3b: neater; stays single, plain stern; waves single, calm or occasional slight swell (3065).

3c: stays single, stern with decorated finial; oars often doubled; varieties of oarbox; waves normally doubled (crest-trough-crest).

Types 1 and 2, though individual details (oars, crew, etc.) may vary, are consistent with the work of single engravers: the form of the waves in type 1, for instance, is characteristic and not found in conjunction with other varieties. Type 3 is less obviously the work of a single hand but there are some dies that combine characteristics of more than one of the three sub-types, so an individual engraver may well be indicated. One die of type 3b has been encountered that lacks the QL signature.⁵⁶

Most of the galleys depicted are of a good size, effectively filling the width of the design area, with the legend *VIRTVS AVG* starting above the bow and ending above the stern. There is, however, a group of dies on which the vessels are distinctly smaller, though identifiably of the same three basic categories. Here, the legend is more spread out, wrapped round the vessel, beginning below the bow and ending past the stern. This is also the case for the dies with mastless galleys to left (see below). Within the group of smaller vessels are several that are essentially unclassified (e.g. 3/25–6). These reverses are designated (1), (2), (3) and (u) – collectively, hereafter, '()'.

Coins bearing galleys of the above general types account for 86 per cent of the London Q-radiates in Rogiet. The remainder comprise several varieties (Fig. 6):

R: Galley to right; prominent fine stem- and stern-posts; two main forms. Oarbox varies. Single stays reaching halfway up the mast. Cabin, steering oar. Oars, 5–7; crew. Waves, variable in form and usually single, are depicted. (Twenty-seven specimens in Rogiet, with varying combinations of vessel, oarbox and waves.) Dies exist that may be described as (R), but with doubled stays, one of which depicts a bird at the masthead (Pl. 25, C).⁵⁷

R': River craft(?) to right. Curved elegant hull, no cabin; rigging similar to right-facing galleys. Oars, 6. (This type not known before the single specimen in Rogiet.)

R-: Galley to right, with cabin, but no mast: two forms, one without a ram. Oars, 6–7; crew armed or unarmed. Waves, 'blobs'.⁵⁸ (Six specimens in Rogiet.)

⁵⁶ BM 1983-3-35, 17.

⁵⁷ BM R3561; Ashmolean (Bodley miscell. B). Bird variety: Ashmolean (Evans).

⁵⁸ Right-facing, mastless galleys, with blob-like waves, are to be found on the 'Rouen' issues of Carausius. These coins, both in gold and billon, bear the legend *LETITIA AVG* or similar. See Beaujard and Havelin 1980.

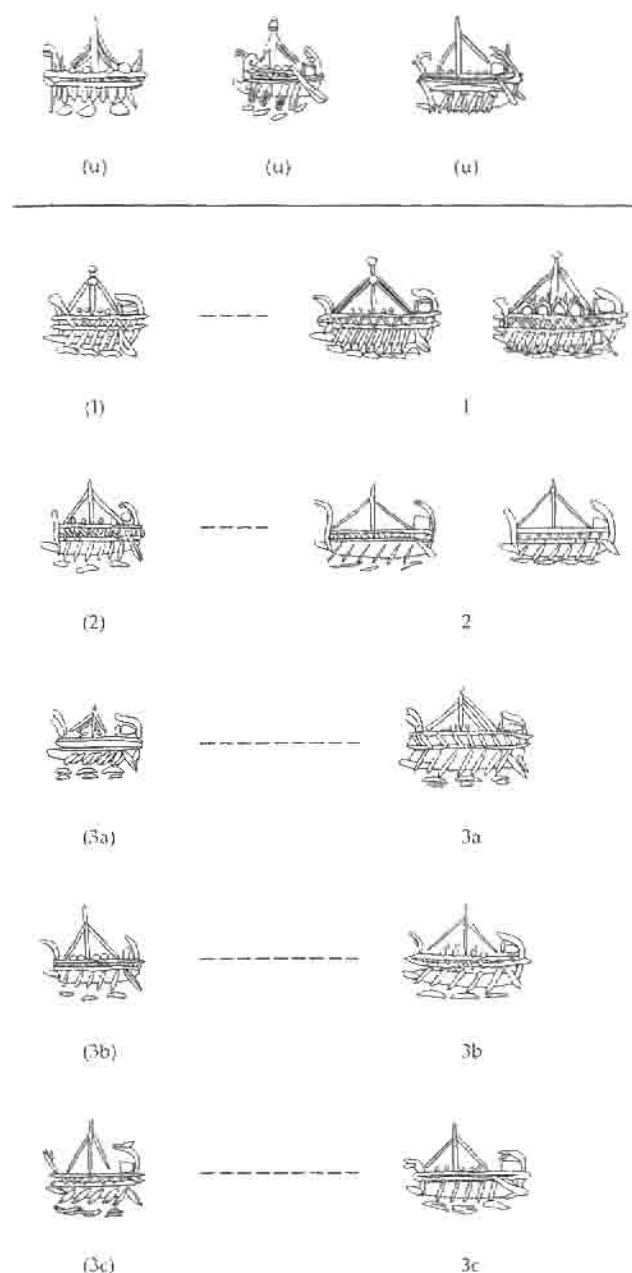


Fig. 5 OL: vessels with masts, to left (NMW/Jackie Chadwick).⁵⁹

L-: Galley with no ram or mast. These are somewhat ambiguous as to direction, but by analogy with the 'Laetitia' issue of Postumus (Fig. 6), which they resemble closely, they face to the left. Similar vessels also appear on coins of Carausius.⁶⁰ (Two specimens in Rogiet.)

L': Small coastal craft (?) to left. Oars, 5; crew. The four Rogiet specimens are from different dies with varying designs:

- (i) without mast; crew armed with spears and shields; two steering oars; single waves;
- (ii) with mast, single forestay, double aft; crew with spears and shields; two steering oars; no waves;

⁵⁹ Fig. 5 is based on (from top, 1. to c.) Rogiet 3173, 3125, 3262, 3051, 3194, 3198, 3082, 3057, 3127, 3042, 3097, 4020, 3159, 3066, 3168.

⁶⁰ E.g. denarius, BM 53.5.12, 247 (Shiel 1977, 120 no. 13).

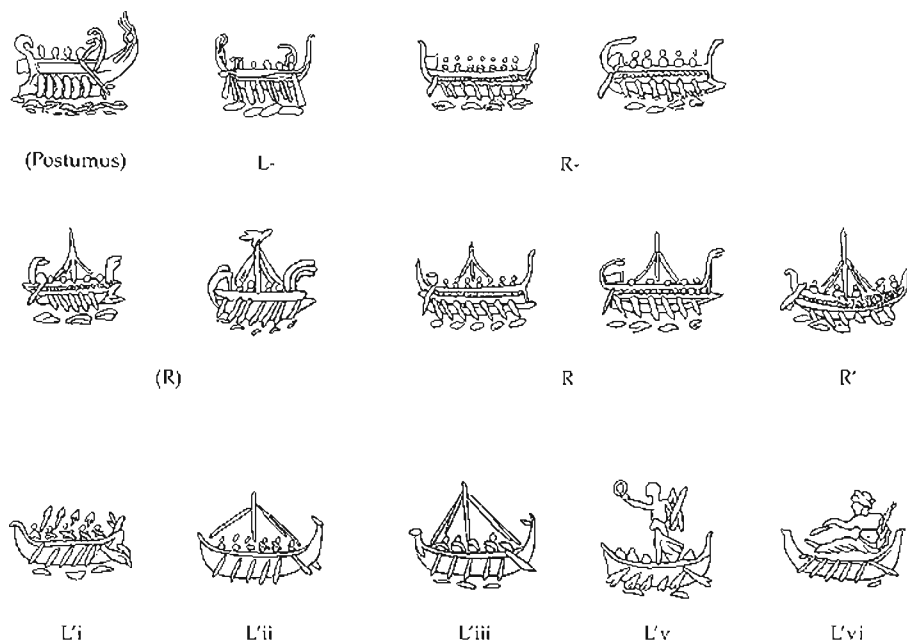


Fig. 6. QL: vessels to right and other variants (NMW/Jackie Chadwick).⁶¹

(iii) with mast, double stays; crew with shields; one steering oar; single waves;

(iv) with mast, double stays; crew with shields; two steering oars; waves double (similar to 3c? but coin corroded).

Two further varieties of this type of boat are represented in the British Museum and Ashmolean collections:

(v) without mast; a figure of Victory stands left among the crew, amidships, holding a wreath and palm (Pl. 25, D).⁶²

(vi) without mast or crew; a river-god(?) is seated left in the boat, holding a wand(?) and reed (Pl. 25, E).⁶³

How do the various obverse and reverse types relate to each other? In attempting some sort of synthesis, it must be remembered that what is summarised above is the cutting of families of dies, rather than their actual use. Their combinations with each other may be summarised as follows:

TABLE 13. Obverse dies and their combinations (Rogiet: QL, 292 coins)

Obv.	Rev.	<i>D busts</i>		<i>B busts</i>		<i>B busts</i> No masts	<i>B busts</i> others	Total Obv.
		<i>galley l.</i>	<i>galley r.</i>	<i>galley l.</i>	<i>galley r.</i>			
A		19	1	13				33
B		3		48	6	2		59
B'				4			1	5
B''		2		5	2	1		10
C				30	8	2	1	41
C'		2		10	1			13
D				61	4	2	3	70
Other		2		2				4
								235

⁶¹ Fig. 6 based on: Postumus, NMW 86.97H/81 (Bassaleg hoard), Rogiet 3004, 3009, 3005; Ashmolean Bodley, Evans, Rogiet 3274, 3278, 3294; 3290, 3291, 3292. Ashmolean, BM.

⁶² BM 1935-11-17, 1314; Ashmolean, two specimens, one from same dies as BM (Pl. 25, D).

⁶³ BM, two specimens, 1863-11-26, 3; 1971-10-12, 1 (Pl. 25, E); Allen 1860.

For the biggest group from London, the following reverse types appear in combination with the different obverses:

TABLE 14. Reverse dies in combination with B1 obverses (Rogiet: Galley I., //QL, 212 coins)

Bust: Rev:	A	B	B'	B''	C	C'	D	Total rev.
(u)				2		1	1	4
(1)	1	4					1	6
(2)		1						1
(3)	1	6					9	16
1	1	8	1		6	1	14	31
2	5	11	1	1	11	3	8	40
3a	2	5		3			9	19
3b	6	10	1	2	10	2	13	44
3c		5			2	4	8	19
3/u	1	1	2		2	1	4	11
								191*

*Actual dies 188 (approx.) – three reverse dies are used with more than one obverse category

From these two tables, some possible pointers begin to emerge, but it is too soon to say whether the gaps are genuine, for instance the lack of draped busts for obverses C and D, or the lack of type 3a reverses with type C obverses.⁶⁴ In Table 14, twenty-six reverse dies (14 per cent) are of () type, with 162 of the mainstream versions. The corresponding proportion used with draped-bust obverses is 35 per cent (13, 24).

Linking the smaller groups into the whole is difficult, though there are some reverse dies of types L-, R- (all), R, (3) and (u) which share waves depicted as single blobs. I cannot prove this, but it would appear that many of these dies (those designated () and L-) could be the earliest dies to be cut. The L- dies hark back most closely to previous coinages (Postumus, Carausius), while the () dies show the most variability and are the hardest to classify. We shall return to this point in the context of the C mint issues. This group also includes the single die which reads 'QV' rather than 'QL' (3262). The obverse dies are for the most part consistent within the scheme set out above.

The legends are extremely consistent, both obverse and reverse, with the exception of a single observed die-cutting error, VITRVS AVG (3046).

C mint: obverses

A similar exercise to that carried out for London coins has revealed five distinctive treatments of the portraits of Allectus on the Q-radiates of the 'C' mint. These have been given the Greek characters α-ε, and may be described as follows, for the dies used with *Virtus Aug* reverses (Fig. 7).

α: A bold, well-modelled head, bearing some resemblance to Carausius; hair has a coarse appearance, brushed forward at the forehead; beard full, with curved outlines, hair indicated by bold horizontal strokes; no eyebrow; cuirass fairly simple, almost all dies lacking rivets across top portion of cuirass on the chest, and with few, prominent *pteriges*; ties are broad ribbons of fairly coarse appearance.

β: A neat head of more rectangular shape, with a square forehead; hair angular, with edges clearly defined, indicated by fine lines, brushed across forehead; beard also neat, less full, with the hair indicated by fine lines running downwards and backwards; fine eyebrow; shoulder more complex, with fine *pteriges*; ties are well-defined ribbons with distinct loops.

γ: A rugged, square-jawed head; hair of fine lines, brushed sideways at forehead; beard mainly short vertical strokes; eye ridge but no eyebrow; the bust similar to β, but always lacks rivets

⁶⁴ One specimen C'(3a noted in Ashmolean (Evans).



Fig. 7. QC: the five obverse treatments (*Virtus* series).

across top portion of cuirass on the chest. *pteriges* are few and point downwards and there are indications of a 'vest'; ties are fine ribbons with a sharp angle and pellets.

δ: A head with a square forehead dropping vertically to a snub nose; hair indicated by short strokes, vertical/forward at forehead; beard indicated by horizontal and vertical strokes, prominent angle on cheek and extends onto neck; eyebrow; prominent shoulder, with hints of decoration and numerous fine *pteriges*, indications of 'vest'; ties are short, twisted(?) ribbons, with one or more pellets at tips. (One die lacks the ties: 3534ff.)

ε: A portrait bearing some resemblance to Carausius, more finely modelled than α; hair indicated by fine strokes, brushed forward at forehead; beard of horizontal and vertical strokes, occasionally onto neck; eyebrow; shoulder with fine *pteriges*, which curve downwards; ties are very fine ribbons, some with pellets.

These five treatments are remarkably consistent. They are also found in the *Laetitia* series, but here there is a degree of variability, notably in the shapes and sizes of the emperor's head. Some effigies are hard to classify, for instance 3303, 3327, 3348. Occasionally, there are traces of the beard on the neck (α, β) and for type γ, there are sometimes rivets on the top of the cuirass, and indications of a 'vest' for some ε dies. In this series, perhaps, the dies are more experimental than in the *Virtus* series, where the die cutting techniques are consistent.

Prima facie, the existence of these five distinct treatments suggests the presence of five die-cutters for the obverse dies at the C mint. One's instinct suggests that this number seems high, in the light of observations elsewhere, for instance the two identified by Estiot at Siscia under Tacitus.⁶⁵ However surprising this might seem, the physical evidence does appear to point to this conclusion. The number of varieties observed in the reverses (below) would appear to support the notion of a significant group of die-cutters. The numbers of dies of each obverse variety in the Rogiet sample are summarised in Table 15.

⁶⁵ Estiot 1987, 26–7.

TABLE 15. Occurrence of QC obverse styles

	α	β	γ	δ	ϵ	Total dies
LAETITIA AVG (1)	8	10	9	4	12	43
LAETITIA AVG (2)	12	11	12	3	14	53
VIRTUS AVG	16	43	33	37	38	167

C mint: reverses

Like the C mint obverses, its reverse dies fall into consistent groups (in the case of *Virtus*, eight) with a very small number of variants that may be related to these groups.

LAETITIA AVG

With one exception, the *Laetitia* and *Virtus* reverses depict very different forms of galleys. Many of the *Laetitia* ships are relatively squat and all lack stern cabins; however, all are equipped with rams, formed by one or by two strokes of an engraving tool, so they appear to be intended to represent warships. Without exception, the oars are depicted swept towards the stern, at the end of the stroke. The *Laetitia* series provides the closest direct comparison with ships depicted on coins, notably denarii, during the reign of Carausius. There is, however, one *Laetitia* die that depicts a ship of a type used with the *Virtus* legend and this appears to form a link between the two series.

The *Laetitia* dies may be subdivided into two reasonably self-consistent groups, the first of which shows waves below the vessels, the second without waves. The vessels of the two groups differ (Fig. 8). There are many obverse die-links within each of these two groups, but only one has so far been observed between them.

First group: dies depicting waves

L: Galley sailing to left; sketchy style, with stem, oarbox and stern formed by paired continuous lines; oarbox |||||; steering oar in water, showing flukes; 5 or 6 paired oars; 0 or 4 (on one die) heads; masthead a cross tree formed by pellets; stays, single or double; ram a long, single or double stroke; waves, single or paired (5 dies in Rogiet).

The general type for the remainder of the series is a galley sailing to the right, in a sea depicted by single or paired waves.

1.1a: Sketchy style as type L above, presumably by the same hand; oarbox |||||; stays, double; waves, single (2 dies).

1.1b: Galley with a squarer overall shape, apparently a development of 1a: oarbox |||||; steering oar in water; 7–8 single oars; 4 heads; masthead cross tree of pellets; stays, double; ram, two strokes; waves, single (5 dies).

1.2a: Curls on stem and stern, stem reaches ram; oarbox ||||| or plain; steering oar more prominent; 4–5 paired oars; 4–5 heads; masthead a compact cross tree of pellets; stays, generally single; ram, generally two strokes; waves, paired (7 dies).

1.2b: Similar to 2a; 5 single oars; ram, single stroke; waves, paired (5 dies, e.g. 3311).

1.3: Tall galley; curls on stem and stern; oarbox ||||| or |||||; steering oar with flukes, fully visible; 4–5 composite oars; 4 heads (one die with none); two forms of cross trees; stays, double, apparently slack; ram, single stroke; waves, single (9 dies).

1.4a: Stem and stern less prominent, some dies with knopped finials; oarbox |||||; prominent steering oar with flukes, across gunwale; 4–5 composite (one die each) or 6–8 single oars; 4–7 heads; masthead a compact cross tree of pellets; stays, double; ram, two strokes; waves, single (5 dies).

1.4b: Similar to 4a, but prominent steering oar has a single curved blade (3 dies, e.g. 3326).

1.5: Unclassified reverses (see plates).

a: sketchy stem/stern; oarbox |||||; no steering oar; oars unclear (5, doubled?); stays, single; waves, single (1 die, 3313).

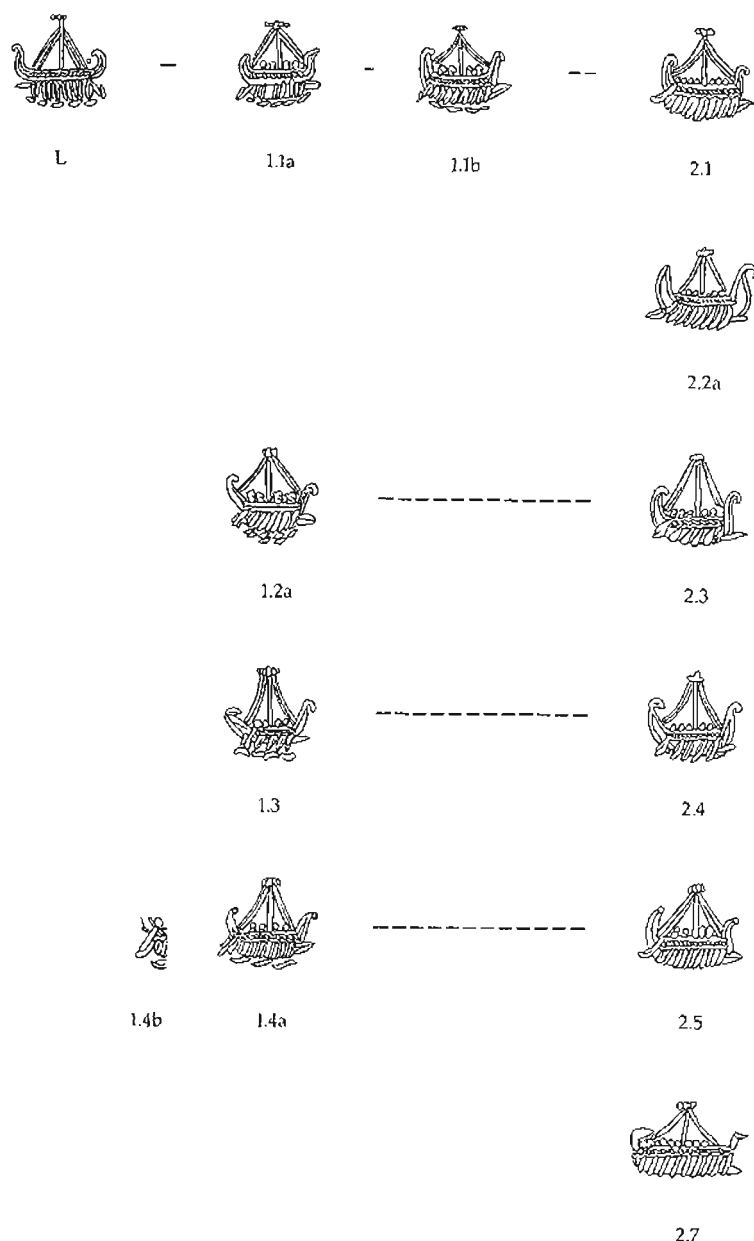



Fig. 8. QC: classification of LAETITIA AVG reverses (NMW/Jackie Chadwick).⁶⁶


- b: Similar to 2b, but single bladed steering oar and ram of two strokes (1 die, 3336).
 c: Similar to 2b, but pellet at masthead; ram of two strokes; waves, single (1 die, 3347).
 d: Bulbous prow, with closed curls on stem and stern; curved oars; hint of a steering oar (1 die, 3323).
 e: Sketchy stem with large curl; oarbox |||||; no steering oar?: 8 curved oars; 5 heads; stays, single; waves, single (1 die, 3348).
 f: Sketchy stem; oarbox; hint of steering oar; 4? paired oars; 5 heads; stays, double; single continuous wave (1 die, 3350).

⁶⁶ Fig. 8 based on: Rogiet 3302, 3335, 3319, 3398; 3354; 3330, 3358; 3343, 3371; 3341, 3365; 3423.


Second group: no waves


The general type is as previously, but without the depiction of the sea. Similar general galley type, but differing forms. Steering oars are more consistently single-bladed and usually prominent.


2.1: Galley with square appearance, curl on stem and stern; oarbox  fine; 6–8 oars, paired; 4, 6 or 7 heads; pelleted cross tree at masthead, clear of stays, which are doubled; ram, two strokes (9 dies).

2.2a: Bulbous stem and stern; oarbox  5–7 oars; 4 heads (one die with none); stays, single; ram, single stroke (10 dies).


2.2b: Similar to 2, but stays, double; ram, two strokes (3 dies, e.g., 3369, which also appears to show the crew armed with spears).


2.3: Curl on stem and stern; oarbox  4–6 oars; 4–6 heads; stays, mostly double; ram, single stroke (8 dies).

2.4: Prominent curl on stem and (usually) stern; oarbox  four oars; 4–6 heads; stays, double, slack; ram, single stroke (11 dies).

2.5: Curved stem and stern often with knopped finials; oarbox  fine; 6–8 oars, curved and moulded to vessel; 4–6 heads; pelleted cross tree at masthead; stays, double, reaching masthead; ram, two strokes (14 dies).

2.6: Unclassified reverses (see plates).

a: Similar to 4, but closed curls and oarbox ; 5 paired oars, with larger steering oar of the same form; 4 heads; stays, double (1 die, 3375).


b: Similar to 4, but oarbox ; 5 single oars, mid-stroke; 5 heads (1 die, 3376, 3401).

c: Similar to 4, but with prominent stem; keel and ram formed by a single long stroke (1 die, 3388).

d: Sketchy vessel with pointed stem and stern; 4 paired oars; 4 heads; ram a short single stroke; sketchy lettering (1 die, 3402).


e: Similar to 3, but with an elegant swan's neck stem; 4 curved composite oars; no steering oar (1 die, 3422).


Transitional type?

2.7: Galley sailing to right, with cabin, as *Virtus*, type 1 (see below); oarbox  open at bow and stern; no steering oar; 9? Oars, swept back at end of stroke; 6 heads; masthead a cross tree of three pellets; stays, single (1 die, 3423).


VIRTUS AVG

The general type comprises a galley sailing to the left as viewed. It has prominent stem- and stern-posts, the latter usually curving over a stern cabin; a ram; a steering oar (occasionally absent); variable numbers of oars and crew (indicated by their heads). There is no indication of waves below the vessel.

1: Sketchy stem post, some continuing down to the ram, which also appears to issue from the front oar; oarbox  small cabin; 7–10 oars, swept back at the end of the stroke; three-four pellets or a short cross-tree at the masthead (15 dies in Rogiet).

2: Simple, beak-like stem post, stopping at the oarbox; ram appears to issue from front oar; oarbox  small cabin; 6–9 oars, swept forward at start of stroke; two-three pellets or a short cross-tree at masthead (17 dies).

2': Variant of 2 with a prominent stem post with a curled finial (1 die, 3450–1).

3: Well-rounded vessel with often prominent stem- and stern-posts, the latter following from the curve of the hull over rear cabin and usually ending in a knopped finial; the ram solid and appearing integral to the hull; oarbox  masthead varies (29 dies).

3'i: Variant of 3 with a bird at the masthead (1 die, 3662).

3'ii: Variant of 3 with prow in the form of a ram's(?) head (1 die, 3731–2).

3'iii: Variant of 3 with animal head(?) prow and lower edge of oarbox formed by pellets (1 die, 3663).

3'iv: Variant of 3 with ram's head(?) prow, sketchy ram and crude lettering (1 die, 3476).

3'v: Variant of 3 but Victory standing to left, holding wreath and palm, replaces the prow/stem post (not in Rogiet).⁶⁷

3'vi: Variant of 3 but figure (Virtus?) at the prow (see note 67).

4: Plain stem extending down to ram; prominent high squarish stem cabin; oarbox \\\\\\\; normally 5 oars, 6 heads and bulbous steering oar; masthead usually a short cross-tree (28 dies).

5: Stem extends down to ram, form varies; oarbox \\\\\\\; 5–6 oars, slightly towards stern or vertical, mid-stroke; 6–7 heads; prominent curving steering oar, usually crossing gunwale; masthead varies (30 dies).

5': Variant of 5 but Victory standing to left, holding wreath and palm, replaces the prow/stem post (1 die, 3687).

6: Stem post springs from deck; stem post emerges from oarbox, \\\\\\\; 5–6 oars, swept back towards end of stroke, variable; usually 6 heads, occasionally 7; small steering oar; masthead varies (21 dies).

6': Variant of 6 but Victory holding wreath and palm stands to left on the prow/stem post (1 die, 2002.14H).⁶⁸

7: Similar to 6, but oarbox \\\\\\\ and 5–6 oars, mid-stroke or swept back towards end of stroke; 6–7 heads; steering oar more prominent; pellet at masthead (14 dies).

8: Stem extends down to ram, which is formed by two lines, the upper usually aligned to oarbox; prominent cabin, form varies – often long curving stern post above; oarbox \\\\\\\; 5, occasionally 6 oars, swept forward to beginning of stroke; curved steering oar; 4, occasionally 5 heads.

Categorised by mastheads:

8a: with single pellet at masthead (7 dies);

8b: with two pellets at masthead (3 dies);

8c: complex masthead (40 dies);

8c': variant of 8c but Victory holding wreath and palm stands to left on prow (not in Rogiet).⁶⁹

Total *Virtus* reverse dies in Rogiet sample: 211

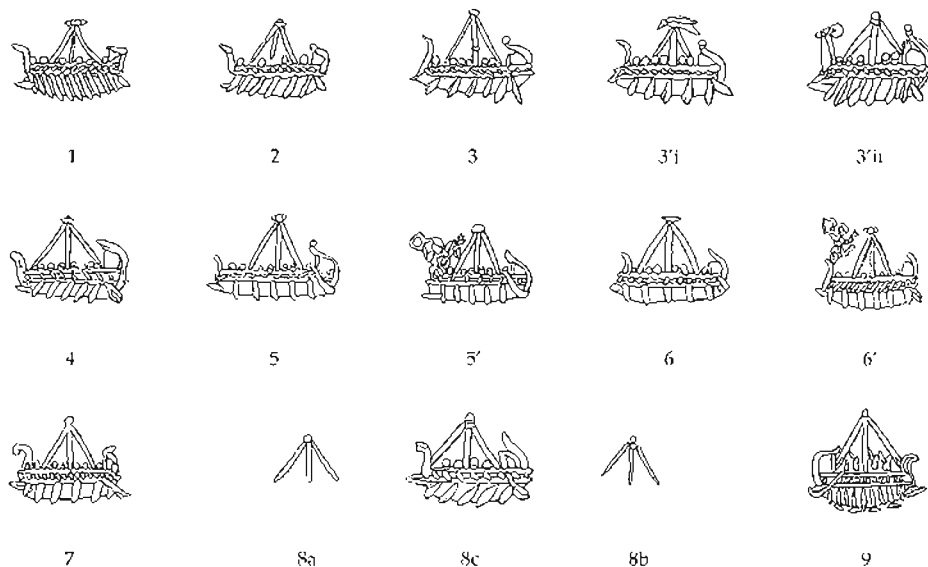


Fig. 9. QC: classification of *VIRTUS AVG* reverses (NMW/Jackie Chadwick).⁷⁰

⁶⁷ Classical Numismatic Group, Inc., Auction 27, 29 September 1993, 1137. A second 'Victory' specimen (CNG Auction 32, 7 December 1994, 452) has re-appeared as CNG Auction 73, 13 September 2006, 684, now classified (correctly) as 'figure (Virtus?) standing at prow brandishing spear and shield' and therefore a new variety, 3'vi.

⁶⁸ Others from same die in BM. Ashmolean.

⁶⁹ Ashmolean (Evans).

⁷⁰ Fig. 9 based on: Rogiet 3428, 3651, 3468, 3662, 3732; 3497, 3501, 3687, 3521, 2002.14H; 3560, 3746, 3608, 3747, CNG, as next note.

One specimen of a further variety of *Virtus* reverse, not represented in Rogiet, has been noted:

9: VIRTVS AVG, -- // QC: galley to right, with ram, cabin and curved steering oar, of a form that does not match the above classification; on board are four armed men; slight indication of waves (Pl. 25, F).⁷¹

This coin shares its obverse die (IMP C ALLECTVS AVG, type 8) with a Rogiet coin of type LAETITIA AVG (group 2, 3420: Pl. 25). Like *Laetitia*, group 2, type 7, this appears to form a type that is transitional between the two series.

Although there are eight significant stylistic varieties of *Virtus*-galley, it need not be necessary to postulate that many die-cutters: several types share a number of characteristics sufficient to enable a suggestion that they form varieties of a single hand, for instance 1 and 2; 5 and 6 (perhaps); and (possibly) 8 as a simplified 3. However, this must remain at present no more than a suggestion.

C Mint: Synthesis

It appears likely that the two groups of reverse dies in the *Laetitia* series are sequential, the first comprising those dies which depict waves (including those with left-facing galleys); the second, those dies that lack waves. This is suggested by two pieces of evidence, though neither is conclusive:

(i) In the case of the single obverse die link between the groups (3315–3356), the earlier state of the die is that combined with the ‘waves’ reverse. Unfortunately, this coin is somewhat corroded, but flaws on the second coin in the letters A and V of ‘Allectus’ may be observed under magnification, that are not present on the first.

(ii) In the course of this study no specimen has yet been found that combines a *Laetitia* reverse depicting waves with an obverse die reading IMP C ALLECTVS AVG, i.e., the shortest of the obverse legends. It appears to be a general principle that obverse legends in a single reign tend to become simplified with time; if so, this may suggest that the two groups are sequential. However, one may note that the longest forms (PI FE ~, P FEL ~, PFI AVG), though lacking in the second group, do appear in small numbers with the *Virtus* series (and that in the Rogiet sample, the proportions of the shorter legends are higher for LAETITIA AVG (2) than for VIRTVS AVG (Table 16)).

TABLE 16. Rogiet hoard, percentage occurrence of QC obverse legends

	<i>Longer obvs</i>	~ P F AVG	~ P AVG	~ AVG	<i>Total dies</i>
LAETITIA AVG (1)	11.6	51.2	37.2	–	43
LAETITIA AVG (2)	–	21.2	51.9*	26.9	52
VIRTVS AVG	1.8	65.3	22.8	10.2	167

*Includes one die IMP ALLECTVS P AVG

An element of evolution may also be observed in the *Laetitia* designs, for instance from L to 1.1a to 1.1b to 2.1, all seemingly from the same hand. Similarly, the pairings 1.2 and 2.3, 1.3 and 2.4, 1.4 and 2.5 appear to have many features in common.

The *Virtus* series itself is so consistent in die-cutting (apart from type 9, there are no ‘unclassifieds’) that it appears to represent a more settled phase and is therefore arguably later than *Laetitia*. Two transitional reverse dies appear to bridge the series: *Laetitia* with a *Virtus* type of galley (type 2.7: Rogiet 3423) and the *Virtus* example with a right-facing, unclassified galley (type 9, Pl. 25, F).

Within the Rogiet deposit, both *Laetitia* and *Virtus* (QC) coins are in fairly fresh condition (though with a number of corroded, presumably plough-scattered, examples). The degree of die-

⁷¹ Classical Numismatic Group, Inc., Auction 38, 6–7 June 1996, 1134. In a few other cases the craft, though belonging to one of the main varieties, varies somewhat in form and may represent an early example of the variety, e.g. 3733–4; and Fitzwilliam, Henderson 3112 (n. 53 above): the coin is poorly preserved but the ship appears to be of type 8, with the upper bodies of the crew indicated, as is the case for this CNG specimen.

linking, however, is greater within the *Virtus* series, which includes several uncirculated, mint-fresh, groupings:

- (i) nos 3534–44: eleven die duplicates, characterised by a type δ (PF) obverse that lacks ‘wreath ties’ and a type 6 reverse, with further links to two α (PF) and two type 6 reverse dies (3421–4); fifteen coins in all.
- (ii) nos 3641–53: thirteen die duplicates, δ (P)/2. This obverse appears with three further reverse dies (2(2), 6: 3640; 3654–6; 3697–9), two of these in turn linked to an ϵ (PF) obverse, itself linked to two further reverse dies (2, 8c: 3443–8: 3614); in all, twenty-seven coins.
- (iii) nos 3595–608; 3619–28: twenty-four coins, from two obverse dies (δ (PF), ϵ (PF)) and four reverse dies (all 8c).
- (iv) nos 3569–71; 3628–31; 3704–8: twelve coins from two obverse dies (ϵ (PF), γ (P)) and two reverse dies (8a, 8c).
- (v) nos 3482–5; 3528; 3555–9; 3694; 3700, 3545: a more diffuse group linking thirteen coins from four obverse dies (β (PF, 2), (P); ϵ (P)) and six reverses (4(2), 6(2), 7(2)).

Whilst it is possible that this degree of linking represents a quirk in the assembling of Rogiet, it is highly likely that the *Virtus* coins from the C mint, notably the above groups, are the very latest in the hoard.⁷²

It is provisionally suggested, therefore, that the *Laetitia* series forms the first phase of production of Q-radiates at the C mint, followed by *Virtus*, the tentative nature of the first – both in obverse and reverse dies – giving way to very settled and consistent production in the second. It appears possible, also, that Q-radiates may have been produced at the C mint before they were introduced at London, after which both mints issued the *Virtus* type. At London we observe, in the reverse dies in particular, signs of experimentation which parallel those at C for the *Laetitia* series. London obverses, though, are more consistently ‘Allectan’ throughout.

In general, it appears that at the C mint, obverse dies of all types and legends were used with reverses of all varieties, within each phase. In the QC series, a single reverse may link obverse dies which differ in style, legend, or both. Where there are obverse-linked pairs, the majority of these involve reverses of the same stylistic type and this may, perhaps, provide a glimpse of the procedures whereby new dies were issued to the moneyers. Something similar, but less consistent, is seen at London; here, where reverse dies with the smaller ships – classified in brackets: ‘()’ – are obverse linked, both dies tend to be of this type, if not always of the same classification.

Some design considerations

The depiction of ships on Roman coins and the simplifications and compromises involved have been discussed elsewhere, notably by Orna-Ornstein, to whose work and that of others the reader is referred. In the context of Allectus’s coinage, the evidence from Rogiet adds little to this discussion, except that one may note the depiction of masts on three specimens of the putative river-going vessels discussed on pp. 188–9 and shown in Figs 18–19 of Orna-Ornstein’s article (Rogiet 3291–3, London mint), a feature not previously observed, and the apparently unique vessel depicted on Rogiet 3294 (also London).⁷³

Of the variations on the standard reverse designs, Rogiet lacks London coins of the types where a victory figure or a ‘river god’ replaces the mast/crew. However, several C mint dies in the hoard are variant, some of them apparently hitherto unrecorded. The most dramatic of these is 3662, a variant of *Virtus* reverse 3, which depicts a prominent bird at the masthead. Webb, in *RIC* 5(2), gives as no. 57 a London Q-radiate with ‘bird on mast’, citing his own ‘The Coinage of Allectus’

⁷² That a proportion of the C mint coins may not have moved very far from their place of minting before they were hoarded might at first sight be taken to support a westerly location for that mint. However, although we know where the hoard was deposited, we cannot know where it was assembled; the question of the location of ‘C’ must remain open.

⁷³ Orna-Ornstein 1995; see also Mason 2003, especially Chapter 9.

no. 88, derived from Roach Smith's *Collectanea Antiqua*.⁷⁴ This may well be the Ashmolean (Evans) specimen referred to above: the galley is a small (R) type, the bird perhaps an eagle. On the Rogiet coin, the bird itself is larger and carefully delineated, having the appearance (if it is possible to tell at the scale involved) of a member of the crow family. The significance of this is uncertain, but this motif also appears on Quentovic coins of Charlemagne in the early ninth century, where the bird has been interpreted as an 'imperial' eagle.⁷⁵ Few Q-radiates have been found on the Continent, and the Charlemagne is a very rare variety, so these two issues would appear to be completely unrelated.

On some QC dies a Victory holding a wreath and palm stands on, or replaces, the stem post. This has been noted previously and occurs for at least four of the *Virtus* varieties, two of them present in Rogiet (3687; 2002.14H) as well as the London versions described above. Another QC variety depicts *Virtus* at the prow (see note 67).

Of other design variants, several QC reverse dies appear to show decorated prows, one of which seems to be a horned ram's head (3731-2). How much to read into these is unclear – it appears to me that some of the minor design variations, for instance the single 2' *Virtus* die, may have arisen in the correction of an engraving error. We may also note that the bird and the 'ram's head' varieties appear to be the work of the same die-cutter; and within this reverse type (3) many dies appear to have small additional decorative details, for instance 3452, 3456. These may represent a personal quirk of this die-cutter. However, the existence of 'bird' and 'victory' varieties at both mints suggests that these may have been officially-inspired.

Metrology and die numbers

From the above discussion, it is apparent that there is no stylistic or physical overlap between the QL and QC series, and these therefore appear to be the products of separate establishments.

Weights may be summarized as follows (see also Appendix C)

QL VIRTVS AVG average 2.95 g, standard deviation 0.37 g (96.6% cleaned)

QC LAETITIA AVG average 3.05 g, standard deviation 0.26 g (93.6% cleaned)

VIRTVS AVG average 2.99 g, standard deviation 0.26 g (87.5% cleaned)

Die-axes: QL, 0°: 32.2%; 180°: 67.8%

QC, 0°: 0%; 180°: 100%

The die-axes parallel the pattern that may be observed for the aureliani.

How big was the issue of Q-radiates? Of the sample provided by the Rogiet hoard, only the *Virtus* element of the QC series provides a sample that is both fully die-studied and big enough (328 coins) for an estimate to be made of the likely number of dies employed in its manufacture. The method chosen is that of Lyon, using two of the four formulae discussed by him:⁷⁶

Formula (2): $D_{est} = d + d_1 \cdot d_1 / 2d_2$

Formula (3): $D_{est} = d + d_1 \cdot (d_1 + d_2) / (2d_2 + 3d_3)$,

where:

D_{est} is a central estimate of the total number of obverse (or reverse) dies used in the coinage;

d is the total number of obverse (or reverse) dies recorded;

d_1 is the number of dies from which only one specimen is recorded;

d_2 is the number of dies from which exactly two specimens are recorded;

d_3 is the number of dies from which exactly three specimens are recorded.

The following results were obtained by averaging the estimates based on Lyon's formulae (2) and (3). In Lyon's view, these are the most appropriate for use where some dies are clearly over-represented in the sample, as in the case of the die-duplications here.

⁷⁴ Webb 1906

⁷⁵ Horstmann 1966. My thanks to Martin Allen for providing me with a copy of this. See also Grierson and Blackburn 1986, pl. 34, 749.

⁷⁶ Lyon 1989.

VIRTUS AVG, - - // QC:

Observed obverse dies:	$d = 167; d_1 = 104; d_2 = 33; d_3 = 14$
Observed reverse dies:	$d = 211; d_1 = 155; d_2 = 35; d_3 = 13$
Observed combinations:	$d = 232; d_1 = 187; d_2 = 25; d_3 = 12$
Total obverse dies:	$D_{\text{est}} = 315; 95\% \text{ confidence range } 286\text{--}352$
Total reverse dies:	$D_{\text{est}} = 518; 95\% \text{ confidence range } 453\text{--}604$
Total combinations:	$D_{\text{est}} = 812; 95\% \text{ confidence range } 699\text{--}969$

In other words, the sample furnished by Rogiet is on the central estimates likely to represent around 53% and 41% of the obverse and reverse dies, respectively, for this element of the Q-radiates (in broad terms, 45–55% and 35–45%).

The method may be applied to the other two groups, but the small sample, on the one hand, of the QC *Laetitia Aug* coins and the probable incompleteness of the study of London, on the other, render the results distinctly speculative. For what it is worth, average results for Lyon's formulae (2) and (3) for the QC *Laetitia* issue (95 obverse dies observed) suggest of the order of 200 obverse dies for that series; and for London (235 obverse dies observed), perhaps as many as 700. Mindful, however, of Buttrely's strictures regarding attempts to estimate the sizes of ancient coinage issues,⁷⁷ it would perhaps be unwise to take this procedure any further: we have no idea of the output per die achieved either at London or at C. However, an issue that may overall have involved over 1,200 obverse dies was presumably not intended to be small.

One comparable third-century study may be cited, by way of wider imperial perspective: Roger Bland's work on the 'silver' radiates of Gordian III (238–44) at the mint of Antioch.⁷⁸ Here, studies of two issues (represented by samples of 355 and 645 coins) suggested obverse die numbers centred on 674 and 2,279 respectively, using the Good/Esty formula.⁷⁹

Chronology and circulation

A definitive answer to the position of the Q-radiates in the coinage of Allectus remains elusive. However, it is now possible to put more flesh on the discussion of some of the questions raised by Burnett,⁸⁰ bearing in mind – as ever – the potential limitations of the single-source sample.

In considering the chronology, we encounter a problem typical of those faced when studying the 'British' empire: for the C mint, where we now (I believe) have some sort of structure for the Q-radiates, there is no obvious sequence within the aureliani, almost all of which are signed S P // C, with a small group S P // CL. At London, there is a sequence for the aureliani, S P // ML followed by S A // ML and S A // MSL, but we are less sure about the QL coins. At both mints, it is possible to trace the same hands at work on the portraits for both Q-radiates and aureliani, but this is not always easy, because the larger die sizes of the latter (typically 20–21 mm) enabled the engravers to work in very different ways: a die with diameter 21 mm (to the inner pelleted circle) provides an area that is thirty-six per cent bigger than a typical Q-radiates die of 18 mm. In any case, the presence of a given engraver's work on both denominations does not in itself indicate whether these were produced at the same time, or sequentially. At C, it is noticeable that in each issue of Q-radiates the obverse dies appear to have been cut principally by four of the five hands identified, the fifth (δ for *Laetitia* and α for *Virtus*) producing less than half as many dies as the others (Table 15, p. 70).

There are in the Rogiet hoard two London Q-radiates with obverse die diameters of 20 mm and these provide at least a suggestion that at some point the two denominations were produced there at the same time (3009, 3075).

⁷⁷ Buttrely 1994.

⁷⁸ Bland 1991.

⁷⁹ These figures, though, are likely to be under-estimates, based as they are on a formula that takes no account of variable output between dies (C.S.S. Lyon, *pers. comm.*, citing Esty 1986, 203). The same method, applied to the QC/*Virtus* series, would suggest die numbers centred on 245 obverses and 406 reverses.

⁸⁰ Burnett 1984.

Burnett's comments about obverse busts at London can to some extent be quantified, both in terms of the number of varieties and the number of coins that use the three main forms – cuirassed (B1) and draped and cuirassed (D1 and D2) – as related to the proportions of QL coins using these forms.

TABLE 17. Obverse busts on London aureliani of Allectus

	Busts	Types (Burnett)	Coins			
			BM coll.	Ashmolean*	B. Latimer	Colchester
S P // ML	B1	12	6	10	7	11
	D1	11	4	7	+?	4
	D2	5	7	4	–	–
S A // ML	B1	27	31	27	10	48
	D1	11	4	5	1	27
	D2	14	5	15	4	–
S A // MSL	B1	11	13	9	6	21
	D1	2	–	1	–	–
	D2	1	–	–	1	–

*Excluding coins derived from Colchester.

The use of draped and cuirassed busts belongs almost exclusively to the periods of the first two marks (Burnett suggests 294 for the introduction of S A // ML). For QL in Rogiet, the figures are: B1: 251; D1: 25; D2: 16. If the use of these busts parallels the aureliani, this would appear to suggest that Q-radiates were introduced at London well before the end of the reign. Their relative scarcity on the Rogiet Q-radiates, however, might be an indication that the QL coins continued in production to a late stage in the reign, when B1 busts were the almost exclusive norm on London aureliani.

An aurelianus published by Lyne is of some interest in this context: this is of the S A // ML issue, with a draped-bust obverse (D1), weighing 4.03 g – but only 18 mm in diameter.⁸¹ Lyne saw this coin as transitional between the aureliani and the introduction of Q-radiates, regarding the latter as the final issues of Allectus and conflating the S A // ML and S A // MSL issues of aureliani. However, another interpretation might see this coin as an aurelianus struck on a blank for a Q-radiate and therefore evidence that the two were contemporary. The weight, to be sure, is very heavy for a Q-radiate (and presumably the reason the blank found its way into the wrong box), but three of the London Q-radiates from Rogiet are heavier. An unusually heavy QL coin (5.74 g) offered at auction in September 2005 is presumably, by the same token, a Q-radiate on a blank intended for an aurelianus.⁸²

The average weights of the Q-radiates lie around 3.0 g at both mints (see above and Appendix C). There are few good groups of well-preserved aureliani with which to compare this figure, though: forty-eight coins in the Burton Latimer hoard, a combination of 31 London and 17 C coins, reportedly averaged 4.40 g.⁸³ Aureliani of Allectus in the British Museum average 4.25 g (London, 62 coins) and 4.17 g (C, 52 coins), with no significant differences between individual marks; in the Ashmolean Museum, 4.34 g (London, 53 coins) and 4.38 g (C, 47 coins).⁸⁴ Figures for the corresponding coins in the Hunterian Museum are 4.05 g (London, 31 coins) and 4.36 g (C, 23 coins).⁸⁵ The Q-radiates therefore appear to lie between two-thirds and three-quarters of the weights of the aureliani.

There are few published analyses, and these appear to suggest that the alloys of both denominations were similar, with silver contents between one and two per cent.⁸⁶ A group of Q-radiates from Rogiet has therefore been examined, together with the three aureliani of Allectus and an example of Carausius for comparison (Appendix D). The QL and QC coins appear to be

⁸¹ Lyne 2003, 166–7.

⁸² CNG Mail Bid Sale 70, 21 September 2005, lot 1061; from the same dies as Rogiet 3277 (2.50 g).

⁸³ Bland 1984, 41.

⁸⁴ The Ashmolean figures exclude coins that are noticeably corroded or worn.

⁸⁵ Robertson 1978, 280–8.

⁸⁶ Cope *et al.* 1997, 33.

very consistent, with silver contents averaging around 1.6 per cent. Their alloys are comparable, though there is a hint in the figures that levels of tin at London are systematically higher than for C. The aureliani, however, seem to have higher levels of silver than those recorded by previous analyses. It is hard to be sure from such a small sample, but bearing in mind their relative weights, the aureliani may have been intended to contain twice as much silver by weight as the Q-radiates. More analyses of well-preserved specimens are clearly needed.

The paucity of comparative hoards containing suitably large numbers of Allectus (the vast majority end very weakly) serves to underline Burnett's caution against using them as evidence for the chronology of the Q-radiates. However, the recent (2004) Gilmorton hoard closes with two coins of Allectus: an aurelianus of the first, S P // ML, London issue and a // QL coin. Rogiet closes very weakly, as regards aureliani, both for Diocletian and Maximian and for Carausius and Allectus (the one London coin of Allectus is again S P // ML), but very strongly in the Q-radiates. Blackmoor, a very different type of hoard, comprises for Allectus predominantly Q-radiates; the few *aureliani* lack late London (S A // MSL) coins. Ewelme's twenty Q-radiates outnumber their larger counterparts by 3:1; as Blackmoor, S A // ML is the latest London issue. Of several hoards that close with a single coin of Allectus, this is a Q-radiates in at least three: Bath, Godmanchester and Pen-y-Corddyn. Of six coins of Allectus in a small deposit from Watchfield (Berks), two of the four recorded in detail are Q-radiates, the others aureliani (S P // ML and S A // ML). It would appear, in fact, that only two hoards have contained significant numbers of Allectus's aureliani: Colchester (164) and Burton Latimer (48), both late deposits that include S A // MSL coins and both of the category 'reformed coins, none before Carausius', hoards that might not be expected to contain significant numbers of Q-radiates (Colchester includes three). Most of the other hoards mentioned here are of the 'unreformed' type, with aureliani in the minority, but the presence of Q-radiates in widely-scattered deposits suggests that they were readily available during Allectus's reign.

Q-radiates are also regularly encountered as single finds and in archaeological excavations. Site finds of coins of Carausius and Allectus have been summarized by Lloyd.⁸⁷ Of sixty-two sites listed, forty-five have produced a total of 305 aureliani of Allectus (196 London, 109 C); forty sites have yielded 254 Q-radiates (103 London, 151 C). In October 2004, the database of the Portable Antiquities Scheme in England and Wales included 142 useful records of recently-found coins of Allectus: 58 aureliani and 84 Q-radiates. The latter may owe their dominance here to the fact that they are readily recognized, even when in a poor state; however, their wide distribution is again noticeable. Where mints could be identified, London aureliani formed a majority (26L: 12C) and C predominated for the Q-radiates (19L: 37C), in line with the other hoard and site evidence.

It has been suggested (above, p. 75) that Q-radiates may well have been produced at the C mint before they were made at London. The portraiture on some of these earliest QC coins is distinctly experimental, perhaps because engravers were having to adjust to the smaller die sizes. However, another explanation should perhaps be entertained: that these are some of the very first dies of the reign. If so, this could put a very different complexion upon how the Q-radiates are to be perceived.

In this context, their relationship to the aureliani is relevant. It seems to me that there is no reason to doubt Burnett's suggestion that Q-radiates were indeed half-aureliani, and therefore intended to be the equivalents of the unreformed pre-274 radiates. Whatever the precise equivalence, Rogiet is a two-denomination hoard that appears to represent a sample of the best coins available during the course of Allectus's reign – and not necessarily at the end of it. If the QC *Laetitia* series represents one of the first (if not *the* first) billon issues of Allectus, it would appear that he may have taken a robust and positive approach to his coinage from the very beginning of his reign, attempting to improve the 'radiate' element of the currency by a significant issue of the Q-radiates and, perhaps by decrying the very worst of the existing radiates, to improve the quality of those existing radiates that were to remain in circulation, as evidenced by those contained in hoards such as Rogiet and Gloucester. This is also of a piece with the more

⁸⁷ Lloyd 1998

dynamic image of Allectus as ruler that is beginning to emerge elsewhere, for instance in the ambitious building project started in 294 that has been discovered in London.⁸⁸ The choice of a distinctive and effectively uniform reverse design for the 'Q' series was presumably a deliberate way of marking out the issue as being new and significantly different from the aureliani. However, coins of uniform design were also a marked feature of Diocletian's reform in 294–5. If the Q-radiates were indeed an early initiative, then it will be clear that they would have predated Diocletian's own coinage reform or at least formed a development that was independent of it.⁸⁹ Whatever Allectus's intentions, they were soon overtaken by the reconquest of Britain, the imposition of Diocletian's currency reform and the suppression of the aureliani and Q-radiates of the 'British' empire.

Postscript

A new hoard from the reign of Allectus came to light at Elveden, Suffolk, in October 2005, too late for detailed consideration in the context of this paper. It comprises single coins of Probus and Maximian, 276 from the reign of Carausius and 349 of Allectus, thereby forming a third (and the largest recorded) example of Bland and Burnett's second category of British Empire hoards (p. 49). All but one of the coins are aureliani; there is one Q-radiate, of the C mint, and a hybrid coin that is of great interest in relation to the discussion on pp. 77–80, above. This is an aurelianus struck from an obverse die intended for Q-radiates and it provides further evidence for the simultaneous production of the two denominations. The reverse, PAX AVG (vertical sceptre), S P // [off flan], could belong at either mint; but the obverse is clearly a London die of 18mm module, type B' (hair brushed sideways at forehead) with bust D1. (This die is not represented in the Rogiet sample.) If the reverse is also of London, this new hybrid coin would appear, *prima facie*, to provide positive evidence that the Q-radiates were introduced relatively early in Allectus's reign, S P // ML being the first of the London marks; it is unfortunate that the mint signature cannot be read. I am indebted to Richard Abdy for preliminary information on the Elveden hoard during its processing under the Treasure Act 1996.

APPENDIX A: A CATALOGUE OF THE ROGIET HOARD

Obverse Busts

The obverse busts are described using the scheme originally developed for recording third-century hoards published in the *Coin Hoards from Roman Britain* series.⁹⁰ This is the first significant hoard of aureliani recorded using the scheme and three further varieties have been added (B3, J7 and L4). The following bust varieties are present in the Rogiet hoard. All refer to heads with radiate crowns (emperors) or busts with crescents behind (empresses), except as indicated. Effigies face to the right as viewed, unless indicated by a suffix 'I'.

A1 head.

A3 head, with traces of drapery to front and rear of truncation.

B1 cuirassed bust, viewed from front. (B1*: head laureate)

B2 cuirassed bust, viewed from rear.

B3 cuirassed bust, viewed from front, with shield at l. shoulder.

C1 draped bust, viewed from front.

C2 draped bust, viewed from rear.

D1 draped and cuirassed bust, viewed from front.

D2 draped and cuirassed bust, viewed from rear.

E2 Empress diademed, bust draped and viewed from front; crescent behind. (E2*: no crescent)

F1 cuirassed bust, viewed from front, holding spear over l. shoulder.

F2 cuirassed bust, viewed from front, holding spear over r. shoulder.

F4 draped and cuirassed bust, viewed from front, holding spear over l. shoulder.

G1 cuirassed bust, from front, spear over r. shoulder, shield on l. shoulder.

G2 cuirassed bust from rear, spear pointing forward, shield on l. shoulder.

G3 as G2 but cuirass engraved as though viewed from front.

H1 head helmeted; cuirassed bust, viewed from front.

H4 head helmeted; cuirassed bust, from front, spear over r. shoulder, shield on l. shoulder.

H5 head helmeted; cuirassed bust, from rear, spear forward, shield on l. shoulder.

H7 head helmeted; draped and cuirassed bust, from rear, spear forward, shield on l. shoulder.

J7 cuirassed bust, viewed from front, r.h. holds *pugio*.

K1 bust in consular robes, viewed from front.

⁸⁸ Casey 1994, 133–4.

⁸⁹ An early date for the Q-radiates might also help to account for the occasional examples found on the Continent.

⁹⁰ Besly 1984.

K4 bust in consular robes, from front; r.h. holds eagle-tipped sceptre.

K5 bust in consular robes, from front; r.h. holds globe.

L2 nude bust viewed from rear; spear forward, aegis on l. shoulder.

L4 nude bust, viewed from rear; spear forward, aegis on l. shoulder, head helmeted.

N1 three jugate cuirassed busts, viewed from front.

Reverse types

With one exception (Sol) the catalogue uses the *Cunetio/CHRB* scheme (q.v.), modified to include a number of additional varieties and a few adjusted descriptions (numbers indicated in bold for both). These are mainly a consequence of the later date of Rogiet: the reverses of the aureliani were not examined in detail for the original *Cunetio* publication, since that hoard closed c.274, too early to contain them.

The treatment of Sol, however, follows throughout that of Estiot's scheme for Aurelian (*La Venèra*, Vol. II/1), which is given in full.⁹¹

Abbreviations: stg, standing; std, seated; r., right; l., left; h., hand. Right and left refer to the design as viewed, except that r.h. and l.h. refer to the right and left hands of the god or personification depicted. Where r.h. and l.h. are not specified, an attribute held in the r.h. is given before that in the left.

Abundantia

1. stg r., emptying cornucopiae held in both hands.

Aequitas

1. stg l., holding scales and cornucopiae.

Aesculapius

2b. stg facing, head l., with r.h. leaning on staff round which is entwined a snake; globe to left, by A's r. foot.

Aeternitas

1. stg facing, head l., holding phoenix on globe in r.h. and raising skirt with l.h.

2. stg facing, head l., holding globe and long rudder.

Altar

1. Altar, with flame above.

Annona

1a. stg l., holding corn ears and cornucopiae; at feet to l., the prow of a ship.

Apollo

3. stg r., aiming bow and arrow held in both hands.

5. stg l., holding branch and mantle.

6. stg l., holding branch in r.h. and leaning l. elbow on a tripod to r.

Clementia

1. stg l., legs crossed, holding vertical sceptre in r.h. and leaning l. elbow on column to r.

Concordia

1. std l., holding patera and double cornucopiae.

1a. as 1, but l.h. holds a single cornucopiae.

2. stg l., holding patera and double cornucopiae.

3. stg l., holding vertical standard in each hand.

7. std l., holding a standard in each hand.

Concordia and Sol

1. Concordia stg r., holding two standards, facing Sol stg l., r.h. raised, l.h. holding a globe.

Diana

1. stg r., holding long-handled lighted torch in both hands.

5. stg r., holding vertical spear and bow; at feet to r., a small stag(?) running r.

Eagle

1. stg r., head turned l.

2. stg l., head turned r.

Emperor

1a. on horseback riding l., raising r. arm and holding transverse sceptre in l. hand; captive on ground to l.

2. stg r., holding transverse spear and globe.

3. std l. on curule chair, holding globe and baton.

3b. as 3, but emperor veiled.

7. walking r., holding transverse spear and shield, trampling an enemy on the ground to r.

9a. on horseback riding r., emperor holds spear and shield, spearing a fallen enemy who lies on ground to r., with r. arm raised.

10a. stg l., holding globe in r. hand and long vertical sceptre in l. hand; captives seated l. and r. at his feet, both looking to r.

11. helmeted, stg l., holding globe and vertical spear (point up).

13. stg l., holding a transverse sceptre in l.h., r.h. crowns a trophy of arms; seated captive on ground to l., turning to look at emperor.

14. stg l. between two standards; r.h. raised, l.h. holding a vertical sceptre.

15. on horseback l., spearing a fallen enemy on ground to l.; shield below horse.

16. advancing r., brandishing a sword and holding a shield, attacking a fallen enemy to r.

Emperor and Concordia

1. Emperor standing r., clasping hand of Concordia standing l.

Emperor and empress

1. Emperor stg r., clasping hand of empress, who is stg l.

2. Empress stg r., l.h. holding uncertain vessel(?), r.h. grasping hand of emperor, who stands l., holding a short sceptre downwards in l.h.

Emperor and female

1. Female stg r., presenting a wreath to emperor, who stands l., holding a long sceptre in l.h.

Emperor and Jupiter

1. Emperor stg r., facing Jupiter stg l. E. holds a long vertical sceptre in r.h., l.h. outstretched; J. holds globe and long sceptre.

⁹¹ Estiot 1995, 148.

1b. Emperor stg r. facing Jupiter stg l. Emperor holds short sceptre in l.h., r.h. outstretched; J. holds globe and long sceptre. (*This corrects Cu.1a.*)

1c. As 1b. but emperor holds nothing in l.h.

Emperor and Mars

1. Mars stg r., holding spear in l.h. and presenting globe to emperor stg l., who holds a long sceptre in his l.h.

2. Mars stg r., holding victory and spear, facing emperor stg l., holding globe and long sceptre.

Emperor and Orient(?)

1. Emperor stg l., holding long sceptre in l.h., his r.h. extended to raise kneeling figure in tunic, with modius on head.

Emperor and Pietas

1. Emperor stg r., r.h. extended, l.h. holding a sceptre; Pietas stg l., r.h. extended, l.h. holding a sceptre. Between them a small altar.

Emperor and Roma

1. Emperor, togate, standing r., r.h. extended; Roma seated l., holding victory and vertical sceptre.

Emperor and soldier

1. Soldier stg r., holding long vertical sceptre and globe; emperor stg l., holding victory and transverse sceptre.

Emperor and Victory

1. Emperor stg l., holding globe and spear, crowned by Victory stg l. holding wreath and palm.

Emperors (two)

1. Two emperors stg facing one another. Each holds a shield resting on the ground; behind, two vertical spears.

2. Two emperors stg facing one another, both sacrificing over an altar placed between them. The emperor on the l. holds an eagle-tipped sceptre in his l.h., the emperor on the r. a baton.

3. Two emperors stg facing one another. The emperor on the l. holds a vertical sceptre in his r.h., l.h. outstretched; the emperor on the r. holds a Victory on globe in r.h. and transverse spear (point forward) in his l.h.

Empress

1. std l., holding branch and long transverse sceptre.

Fecunditas

1. stg l., holding patera and cornucopiae; at her feet to l. stands a small child with arms raised.

Felicitas

1. stg l., holding long vertical caduceus and cornucopiae.

1a. as 1, but r.h. holds short caduceus.

1c. as 1, but F. is standing facing, head r.

3. std l., holding short caduceus and cornucopiae.

4. stg l., holding short caduceus in r.h. and leaning l. elbow on column to r.

5. stg l., holding short caduceus and long vertical sceptre.

6. stg l., holding patera and long caduceus; altar on ground to l.

Fides

1. stg l., holding vertical standard in each hand.

2a. stg l., head r., holding vertical standard and transverse standard.

2b. stg l., head l., holding vertical standard and long transverse sceptre.

3a. stg l., holding vertical standard and long vertical sceptre.

6. stg l., holding vertical sceptre and transverse standard.

Fides and Sol

1. Fides stg r. holding two standards, facing Sol stg l., r.h. raised, l.h. holding a globe.

Fortuna

1. std l., holding rudder and cornucopiae; beneath seat, wheel.

1a. as 1, but without wheel beneath seat.

2. stg l., holding rudder and cornucopiae.

Genius

1. stg l., holding patera and cornucopiae; on ground to r., a standard

1a. as 1, but without standard.

Hercules

1. stg r., r.h. resting on hip, l.h. holding lion skin and club, which rests on a rock.

3. stg l., r.h. holding branch, l.h. holding club and lion skin.

3b. stylistic variant of 3 (Postumus).

Hercules and lion

1. Hercules stg r., wrestling Nemaean lion; club on ground to l.

Hippocamp

1. Hippocamp r.

Indulgentia

1. std l., holding corn ears and long transverse sceptre.

Juno

1. stg l., holding patera and long vertical sceptre.

1b. as 1, but peacock at feet to l.

3. std l. on throne, holding ?flower and child in swaddling clothes.

Jupiter

1. stg l., holding thunderbolt and long vertical sceptre.

1a. as 1, with small figure of emperor standing at feet to l.

1c. as 1, but at feet to l. is an eagle stg l.

2. stg l., head r., holding long vertical sceptre and thunderbolt.

6. std l., holding Victory on globe and long vertical sceptre.

7. stg l., head r., holding thunderbolt and long vertical sceptre.

9. stg l., holding Victory on globe and sceptre; eagle at feet to l.

10. stg l., head r., holding thunderbolt and vertical sceptre. At his feet to l., an eagle, l., head r.; to his r. and behind, two standards.

11. stg r., holding long vertical sceptre and thunderbolt.

Jupiter and Hercules

1. Jupiter stg r., holding thunderbolt and long sceptre, facing Hercules stg l., r.h. extended and l.h. holding club and lion skin.

Laetitia

1. stg l., holding wreath and anchor. (*Corrects Cunetio/CHRB*)

3. stg l., holding wreath and cornucopiae. (*Corrects Cunetio/CHRB*)

Mars

- 1b. walking l., holding branch in r.h. and transverse spear (point up) and shield in l.h.
- 2b. walking r., holding transverse spear (point forward) and trophy over l. shoulder.
- 2d. as 2b, but captive on ground to r.
4. stg l., holding branch in r.h. and vertical spear (point up) and shield resting on ground in l.h.
7. stg l., holding branch and vertical spear (point down); shield on ground to l.

Mercury

- 1a. stg l., holding purse and short caduceus.

Minerva

3. walking l., holding branch in r.h. and transverse spear (point up) and shield in l.h.
4. stg l., holding branch in r.h. and spear and shield (resting on ground) in l.h.

Moneta

1. stg l., holding scales and cornucopiae.

Nemesis

1. stg facing, head r., r.h. raised to head, l.h. holding a long palm branch.

Neptune

2. stg l., holding small dolphin and vertical trident.

Pax

1. stg l., holding branch and transverse sceptre.
- 1b. as 1, but l.h. holds vertical sceptre.
4. running l., holding branch and long transverse sceptre.
- 4b. as 4, but holds vertical sceptre in l.h.
6. stg l., holding branch and standard.
7. stg l., holding Victory on globe and transverse sceptre.

Perpetuitas

1. stg facing, head l., holding globe and transverse sceptre, leaning l. elbow on column to r.

Pietas

4. veiled, stg l., sacrificing with r.h. over altar on ground to l., l.h. holding a box.
- 4a. as 4, but P. is diademed.
7. stg r. before altar to r., r.h. raised, l.h. holding a box of perfumes(?).

Prince

1. stg l., holding globe and vertical spear (point down).
- 1b. as 1, but P. holds long vertical sceptre in l.h.
- 2c. stg l., holding baton and transverse spear (point forward); two vertical standards to r.
- 2d. stg l., holding baton and transverse sceptre.
- 3a. stg l., holding vertical standard and long vertical sceptre.

Providentia

1. stg l., holding globe and long transverse sceptre.
- 1a. as 1, but l.h. holds cornucopiae.
2. stg l., holding baton and cornucopiae; globe at feet to l.
- 2a. as 2, but l.h. holds vertical standard.
- 2b. as 2, but l.h. holds long vertical sceptre.
3. stg l., holding baton and cornucopiae, with l. elbow leaning on column to r.; globe at feet to l.
4. stg l., holding corn ears and cornucopiae; modius on ground to l.

River god

- 1b. reclining l., head horned, r.h. resting on knee, l.h. holding pitcher and reed. Behind, to l., the forepart of a boat.

Roma

2. stg l. on shield, holding Victory on globe and long vertical sceptre.

Sacrificial implements

2. Sacrificial implements: l. to r., lituus, knife, patera, jug (prominent), simpulum, sprinkler.
- 2a. as 2, with order reversed.

Salus

1. stg l., holding in r.h. a patera from which a snake rising from an altar to l. is feeding; in her l.h. S. holds a long vertical sceptre.
2. stg r. feeding snake held in r.h. from a patera held in l.h.
5. stg l., feeding snake rising from altar to l. from a patera held in her r.h.; her l.h. rests on the back of her seat.
- 5a. as 5, but S. holds the patera in her l.h. and strokes the snake with her r.h.

Securitas

2. stg facing, head l., holding long vertical sceptre in r.h., with l. elbow leaning on a column to r.
- 2a. as 2, but no sceptre: r.h. raised to head.
- 2b. as 2, but r.h. holds baton instead of long sceptre.
4. stg r., legs crossed, holding r.h. to head and leaning l. elbow on column to r.

Sol

1. stg l., r.h. raised, l.h. holding a globe. (= *Cu.2*)
2. stg l., r.h. raised, l.h. holding a whip. (= *Cu.1; not represented in Rogiet*)
3. stg facing, head to l., r.h. raised, l.h. holding a globe. (= *Cu.2b/6*)
4. as 3, with a captive seated at feet to l., looking l.
5. as 1, with a captive seated at feet to l., facing S. (*not represented in Rogiet*)
6. as 3, with two captives at feet to r. and l., both looking l.
- 6a. as 6, but both captives look towards S.
7. walking/running l., r.h. raised, l.h. holding a whip. (= *Cu.3*)
8. walking/running l., r.h. raised, l.h. holding a globe; one captive seated at feet to l., looking l. (*not represented in Rogiet*)
9. walking/running l., as 8; two captives seated at feet to r. and l., both looking l.
10. walking/running l., r.h. raised, l.h. holding a whip; two captives seated at feet to r. and l., looking towards S.
11. walking/running to r., r.h. brandishing a vexillum, l.h. holding a globe surmounted by a crescent, trampling a captive facing him on the ground, r. (*not represented in Rogiet*)
12. walking/running to r., r.h. brandishing a branch, l.h. holding a bow, trampling a captive facing him on the ground, r.

Sol in quadriga

1. Sol facing in spread quadriga, r.h. raised, l.h. holds a globe and a whip.
- 1a. As 1, but no whip. (*not represented in Rogiet*)
- 1b. As 1, but Sol facing, head l. (*not represented in Rogiet*)
- 1c. As 1b, but no globe.
2. Sol in quadriga l., r.h. raised, l.h. holds a globe and a whip.
- 2a. As 2, but no globe.

Spes

1. walking l., holding flower in r.h. and raising skirt with l.h.

1a. as 1, but stg l

Temple

2. Roma std facing in hexastyle temple

Trophy

1. Trophy of arms; at each side, a bound and seated captive.

Ubertas

1. stg l., holding purse and cornucopiae.

Venus

1b. stg l., holding helmet in r. hand and long transverse sceptre in l.h.; l. elbow leans on shield which rests on ground.

2. stg l., holding helmet and long vertical spear; on the ground to l. a shield rests against her legs.

3. std l., r. arm outstretched to small child standing at her feet to l., looking up at her; V. holds a long transverse sceptre in her l.h.

5. stg l., holding apple (or globe) and long vertical sceptre.

5a. as 5, but at her feet to l. stands a small child r., with arms raised.

6. stg r., holding long vertical sceptre and small child (or cupid?).

Vesta

1a. std l., holding patera and long transverse sceptre.

Victories (two)

1. two victories stg facing one another, pinning a shield inscribed SC to a palm tree between them.

Victory

1. stg l., holding wreath and palm against l. shoulder.

2. stg l., holding shield which rests on ground and palm against l. shoulder.

3. walking l., holding wreath and palm against l. shoulder.

3a. as 3, but V. is running.

3c. as 3, but at feet to l. a bound and seated captive.

4. walking l., holding wreath and trophy over l. shoulder.

6. stg l., wings outstretched and holding a diadem or snake in both hands, between two shields.

8. running r., holding wreath and palm against l. shoulder.

9b. running l., holding wreath and palm against l. shoulder, kicking a bound and seated captive to l.

12. running r., holding wreath and trophy over l. shoulder; captives to l. and r. on ground. (= 11 + captives)

13. stg (walking?) l. on globe between two captives; she holds a wreath and a palm.

Virtus

1. stg l., holding shield which rests on ground and long vertical spear.

3b. stg r., holding long vertical spear (point up) and shield which rests on ground.

4b. stg l., holding branch and long vertical spear (point down); shield on ground to l., resting against his r. leg.

5. stg l., holding globe and long vertical spear (point down).

7a, 7a'. stg l., holding Victory and shield + spear (point up); Victory faces r. towards V. (7a) or l., away from V. (7a').

Winged horse

2. prancing r.

Standard References

- RIC P.H. Webb, *The Roman Imperial Coinage*, vol. V.1 (London, 1927), V.2 (London, 1933).
 Elmer G. Elmer, 'Die Münzprägung der gallischen Kaiser in Köln, Trier und Mailand'. *Bonner Jahrbücher* 146 (1941).
 Cunetio E. Besly and R. Bland, *The Cunetio Treasure* (London, 1983).
 Normanby R. Bland and A. Burnett, *CHRB VIII* (1988).
 Bastien P. Bastien, *Le monnayage de l'Atelier de Lyon* (Wetteren, 1972, 1976).
 Estiot S. Estiot, *Ripostiglio della Venèra: nuovo catalogo illustrato*, vol. II (Rome, 1987, 1995).
 Gricourt D. Gricourt, *Ripostiglio della Venèra: nuovo catalogo illustrato*, vol. IV (Rome, 2000).
 Carson R.A.G. Carson, 'Carausius et fratres sui ...' (*Studia Paulo Naster Oblata I: Numismatica Antiqua* (Leuven, 1982)).
 Burnett A. Burnett, 'The coinage of Allectus', *BNJ* 54 (1984).

Catalogue conventions

The hoard comprises 3,813 coins, of which 3,778 coins were acquired as treasure through the Department for Culture, Media and Sport in 1999 (NMW accession number 99.31H, sub-numbered 1–3778). A further 35 coins, found before implementation of the Treasure Act 1996, have been recorded, shown by three finders; of these, NMW has since acquired six: 2000.7H/1–5 and 2002.14H. Accordingly, since a single numbered sequence is not practicable without the likelihood of confusion with the Museum's accession numbers, the main catalogue is numbered by type (variety), following the precedents of hoard publications such as Cunetio and Normanby. An asterisk against a catalogue number indicates that the type is illustrated; an obelisk indicates a catalogue note. References to catalogue entries in the main text are in **bold**. Weights given in *italics* indicate coins that have not been cleaned.

Appendix B lists in fuller detail the 749 Q-radiates of Allectus acquired by NMW, study of which forms the basis of pp. 62–80, above. These are listed by their accession sub-numbers, references to which are given in *italics*. Some numbers appear out of sequence, resulting from adjustments to the original listing when this material was re-examined for the purposes of publication. The most substantial movements are cross-referenced. The letters 'u' and 'c' adjacent to some weights signify 'uncleaned' and 'significantly corroded', respectively.

Numbering of the plates follows the principles above. Pls 3-15 and the counterfeits (Pl. 25) are numbered as catalogue types: coins of Allectus (Pls 16-25) by their museum accession sub-numbers. In Pls 16-25, the only die links indicated are those for which both coins are illustrated, with link references to be read as '3XXX'. Considerations of space have precluded the illustration of all dies and linked specimens as well as many fine specimens of the aureliani.

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
A: CENTRAL EMPIRE TO 270						
VALERIAN I						
Rome (7)						
	<i>obv.</i> IMP C P LIC VALERIANVS AVG			<i>Cunetio</i>		
*1	APOLINI PROPG	Apollo 3	D1	437	74	2 3.35, 2.75
2	FIDES MILITVM	Fides 1	D1	441	89	2 2.94, 2.43
3	VICTORIA AVGG	Victory 1	D1	447	125	1 3.11
	<i>obv.</i> IMP C P LIC VALERIANVS PF AVG					
4	PM TR P V COS IIII PP	Emperor 3	D1	493	142cv	1 2.76
5	VICTORIA AVGG	Victory 2	D1	498	128	1 2.49
East (3)						
	<i>obv.</i> IMP C P LIC VALERIANVS AVG					
*6	VIRTVS AVGG	Emperors (two) 3	D1	845	292	1 3.48
	<i>obv.</i> IMP C P LIC VALERIANVS PF AVG					
7	VOTA ORBIS	Victories (two) 1	D1	853	295	1 3.66
	<i>obv.</i> IMP VALERIANVS AVG					
8	PM TR P V COS IIII PP	Emperors (two) 1	D1	835	277	1 3.29
GALLIENUS (Joint Reign)						
Rome (3)						
	<i>obv.</i> IMP C P LIC GALLIENVS AVG					
9	VIRTVS AVGG	Virtus 1	B1	549	181	1 2.28
	<i>obv.</i> IMP C P LIC GALLIENVS PF AVG					
10	LAETITIA AVGG	Laetitia 1	B1	566	145	1 3.56
	<i>obv.</i> IMP GALLIENVS PF AVG GERM					
†11	VICTORIA AVGG	Victory 2	B1	611	169	1 3.27
Gaul (1)						
	<i>obv.</i> GALLIENVS PF AVG					
12	VICT GERMANICA	Victory 3	B1	84	cf. 42	1 3.76
Viminacium (1)						
	<i>obv.</i> IMP GALLIENVS P AVG					
*13	SALVS AVGG	Salus 1	D2	767	397	1 3.35
East II (1)						
	<i>obv.</i> IMP C P LIC GALLIENVS PF AVG					
14	VIRTVS AVGG	Emperors (two) 3	D2	852	456	1 3.94
DIVUS VALERIAN II						
Rome (2)						
	<i>obv.</i> DIVO CAES VALERIANO					
15	CONSECRATIO	Altar 1	A3	678	24	1 3.25
16	CONSECRATIO	Altar 1	D2	680	24	1 2.60

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
53	FELICIT AVG <i>7th series</i> <i>obv. IMP GALLIENVS AVG</i>	Felicitas S	P - // -	A1	1647	474	1	2.89
54	FORT REDVX <i>obv. IMP GALLIENVS PF AVG</i>	Fortuna 1a	- - // MS	A3	1735	483	1	2.37
55	PM TR P VII COS Siscia (2) <i>obv. GALLIENVS AVG</i> <i>1st/2nd series</i>	Emperor 3b	- - // MS	A1	1752	cf455	1	3.24
56	PAX AVG running l. <i>4th series</i>	Pax 4	- - // -	A1	1798	576	1	3.23
57	PROVI AVG Antioch/East (4) <i>obv. GALLIENVS PF AVG</i>	Providentia 2	- // // -	A1	1833	580	1	3.42
58	VICTORIA AVG	Victory 3	* - // -	B1	1890	662	1	3.84
*59	VIRTVS AVG <i>obv. GALLIENVS AVG</i>	Virtus 1	* - // -	B1	-	667	1	3.17
60	VIRTVS AVGVSTI	Hercules 1	* - // -	D2	1900	673	1	3.72
61	SALVS AVG	Apollo 6	- - // PXV	B1	-	610	1	3.74
SALONINA (Sole Reign)								
Rome (7)								
<i>obv. SALONINA AVG</i> <i>Issues 1-2</i>								
62	VENVS GENETRIX	Venus 6	- VI // -	E2	993	30	1	3.22
63	VESTA <i>Issue 5</i>	Vesta 1a	- // Q	E2	987	32	1	3.75
*64	FECVNDITAS AVG	Fecunditas 1	- Δ // -	E2	1318	5	3	4.30, 3.89, 3.15
65	VENVS VICTRIX	Venus 2	- H // -	E2	1321	31	1	2.75
66	IVNO CONSERVAT	Juno 1b	- N // -	E2	1324	11	1	3.68
Milan (5)								
<i>obv. SALONINA AVG</i> <i>5th series</i>								
67	VENVS VICT <i>7th series</i>	Venus 5a	- - // -	E2	1679	66v.	1	3.34
68	AVG IN PACE <i>8th series</i>	Empress 1	- - // MS	E2	1765	58	3	3.66, 3.12, 3.06
69	IVNO AVG	Juno 3	- - // MS	E2	1785	62	1	2.70
MACRIANUS								
Eastern mint (1)								
70	<i>obv. IMP[]ACRIANVS PF AVG</i> SOLI INVICTO	Sol 1	{}? - // -	D1		12	1	3.46
CLAUDIUS II								
Rome (17)								
<i>Issue II</i> <i>obv. IMP C CLAVDIVS AVG</i>								
71	IUVI STATORI	Jupiter 2		D2	596	52	1	4.29
72	SPES PVBLICA	Spes 1		B1	611	102	1	4.19
73	VICTORIA AVG	Victory 1		B1	616	104	1	3.48
74	ANNOA AVG	Annona 1a		D2	638	18	1	3.08
75	VIRTVS AVG	Virtus 4b		A1	642	109	1	3.62
76	VIRTVS AVG	Virtus 4b		D2	645	109	1	3.55
†77	VIRTVS AVG	Virtus 4b	see note	A1	649	109	1	3.25
78	GENIVS EXERCI	Genius 1a		D2	661	48	1	2.95
79	FIDES EXERCI	Fides 2b		D2	693	36	1	3.06

Normanby

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
80	PROVIDENT AVG <i>Issue IV</i> <i>obv. IMP CLAVDIVS AVG</i>	Providentia 3	B1	705	91	1	3.74
81	VIRTVS AVG	Virtus 1	- B II -	A1	923	111	1 3.83
82	PM TR P II COS PP	Emperor 2	- - II - (?)	A1	932ff.	12	1 2.78
83	PM TR P II COS PP	Emperor 2	- - II -	A1	932	12	1 2.74
84	FORTVNA REDVX	Fortuna 2	- - II Z	A1	957	41	1 2.71
*85	MARTI PACIFERO	Mars 1b	- X II -	A1	-	-	1 3.81
86	LAETITIA AVG	Laetitia 1	- XII II -	B1	997	56	1 3.46
87	LAETITIA AVG	Laetitia 1	- - II XII	A1	999	56	1 3.20
Milan (5)							
<i>obv. IMP CLAVDIVS P F AVG</i> <i>Issue I</i>							
*188	SPES PVBLICA	Spes 1	- - II P	D2	1005	168	1 4.18
89	VICTORIA AVG	Victory 8	- - II S	D2	1008	171	1 3.36
90	FELIC TENPO	Felicitas 5	- - II T	D2	1015	145	1 2.79
<i>Issue II</i>							
91	VIRTVS AVG	Mars 2b	- - II P	D2	1020	172	1 3.57
<i>Issue III</i>							
92	DIANA LVCI F	Diana 1	- - II P	D2	1037	144	1 3.47
Siscia (4)							
<i>obv. IMP CLAVDIVS AVG</i> <i>Issue II b</i>							
*93	SPES AVG	Spes 1	- II II -	D2	-	191	1 3.72
<i>Issue III a</i>							
94	LAETITIA AVG	Laetitia 3	- I II -	B1	-	181	1 3.53
95	SPES AVG	Spes 1a	- I II -	B1	1083	-	1 4.37
96	SPES AVG	Spes 1a	II - II -	B1	1086	-	1 3.52
Cyzicus (2)							
<i>obv. IMP C M AVR CLAVDIVS AVG</i>							
*97	VICTORIAE GOTHIC	Trophy 1	- - II SPQR	D2	-	251	1 4.90
<i>obv. IMP CLAVDIVS PF AVG</i>							
*98	FORTVNA REDVX	Fortuna 2	- - II SPQR	D2	-	234	1 3.87
DIVUS CLAUDIUS							
Rome (6)							
<i>obv. DIVO CLAUDIO</i>							
99	CONSECRATIO	Altar 1		A1	2313	259	4 3.32, 3.08, 2.90, 2.79
*100	CONSECRATIO	Eagle 2		A1	2314	266	2 3.31, 2.42
QUINTILLIUS							
Rome (8)							
<i>obv. IMP C M AVR CL QVINTILLVS AVG</i>							
101	PAX AVGVSTI	Pax 1	A - II -	D1	1146	26	1 3.03
102	VICTORIA AVG	Victory 8	- I II -	D1	1152	33	1 2.84
103	VICTORIA AVG	Victory 8	- - II I	D1	1153	33	1 3.38
*104	FIDES MILITVM	Fides 3a	- E II -	D1	1165	18	1 3.46
105	AETERNIT AVG	Sol 1	N - II -	D2	1186	7	1 3.10
106	SECVRIT AVG	Securitas 2b	- XI II -	D1	1197	31	2 3.55, 3.38
107	SECVRIT AVG	Securitas 2b	- XI II -	D2	1198	31	1 2.44
B: GALLIC EMPIRE, 260-74							
POSTUMUS							
Mint I (Trier) (34)							
<i>obv. IMP C POSTVMVS PF AVG</i> <i>Series Ib</i>							
108	SALVS PROVINCIARVM	River god 1b		D1	2372	123	2 3.37, 3.18
109	VICTORIA AVG	Victory 9b		D1	2375	125	1 4.65

Cunetio Elmer

Cat. No			Marks	Bust	Elmer	Qty	Weight
Series 1c							
110	FIDES MILITVM	Fides 1		D1	2386	133	1 3.13
111	FIDES MILITVM	Fides 1		D1	2386	189	1 2.87
112	PM TR P COS II PP	Emperor II		D1	2387	185	1 3.16
Series 2b							
113	HERC PACIFERO	Hercules 3b		D1	2395	299	1 2.43
114	VIRTVS AVG	Virtus 3b		D1	2400	190	1 3.47
Series 3a							
115	MONETA AVG	Moneta 1		D1	2404	336	1 3.57
Series 3b							
116	MONETA AVG	Moneta 1		D1	2413	336	3 4.22, 2.78, 2.64
117	PROVIDENTIA AVG	Providentia 1		D1	2415	337	3.11
Series 4aii							
*118	VIRTVS AVG	Virtus 9		D1	2427	291	1 3.45
*†119	SALVS AVG	Aesculapius 2b		D1	-	415v	1 3.09
Series 4bi							
120	SERAPI COMITI AVG	Serapis 2a		D1	2437	383	1 3.95
Series 4bii							
121	VBERTAS AVG	Uberitas 1		D1	2440	394a	1 3.65
Series 5							
122	PAX AVG	Pax 1		D1	2450	565	2 4.24, 2.73
123	ORIENS AVG	Sol 7		D1	2451	569	1 3.09
Series 6							
124	PAX AVG	Pax 1	P - // -	D1	2453	566	5 3.39, 3.04, 2.96, 2.83, 2.64
125	ORIENS AVG	Sol 7	P - // -	D1	2454	568	4 3.24, 3.18, 3.10, 2.75
126	COS IIII	Nemesis 1		D1	2455	586	4 3.55, 3.16, 2.95, 2.75
Series 7							
127	IMPX- COS-V-	Nemesis 1		D1	2462	597	1 3.24
Cologne (3)							
Series 1							
obv. IMP C POSTVMVS PF AVG							
128	IOVI VICTORI	Jupiter 7		D1	2468	571	3 3.39, 2.64, 2.52
Milan (1)							
Issue 5							
obv. IMP C POSTVMVS PF AVG							
129	SALVS AVG	Aesculapius 2	- - // P	D1	2496	618	1 3.34
LAE LIAN							
Mint II (Cologne?) (3)							
obv. IMP C LAELIANVS PF AVG							
*†130	VICTORIA AVG	Victory 8		D1	2501	625	3 3.55, 3.34, 2.81
MARIUS							
Mint I (1)							
obv. IMP C MARIVS PF AVG							
*131	SAEC FELICITAS	Felicitas 1a		D1	2505	634	1 3.13
VICTORINUS							
Mint I (32)							
Elmer							
Issue 2							
obv. IMP C PIAV VICTORINVS PF AVG							
132	PAX AVG	Pax 1	V * // -	D1	2518	651	1 2.73
133	FIDES MILITVM	Fides 1	- - // -	D1	2522	654	2 3.01, 2.66
Issue 3b							
obv. IMP C VICTORINVS PF AVG							
134	PAX AVG	Pax 1	V * // -	D1	2530	682	10 4.31, 3.62, 3.35, 3.11, 3.09, 2.87, 2.86, 2.83, 2.79, 2.33

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>Elmer</i>	<i>Qty</i>	<i>Weight</i>
135	INVICTVS	Sol 7	* - // -	D1	2534	683	11	5.08, 3.96, 3.60, 3.32, 3.23, 2.98, 2.75, 2.66, 2.16, 2.15, 1.97
	<i>obv.</i> IMP C VICTORINVS PF AVG							
136	PAX AVG	Pax 1	V * // -	D1	2538	682	1	2.36
137	INVICTVS	Sol 7	* - // -	D1	2539	683	1	1.96
	<i>Issue 3c</i>							
	<i>obv.</i> IMP C VICTORINVS PF AVG							
†138	PAX AVG	Pax 1	V * // -	D1	2543	682	1	3.35
†139	INVICTVS	Sol 7	* - // -	D1	2545	683	3	3.10, 3.09, 2.43
	<i>obv.</i> IMP C VICTORINVS PF AVG							
*140	PAX AVG	Pax 1	V * // -	D1	2547	682	1	3.00
†141	INVICTVS	Sol 7	* - // -	D1	2548	683	1	3.10
	Mint II (29)							
	<i>Issue 1b</i>							
	IMP C PI VICTORINVS AVG							
†142	AEOVITAS AVG	Aequitas 1		B1	2561	701	1	3.37
	<i>Issues 1:2 mule</i>							
	IMP C VICTORINVS PF AVG							
143	AEOVITAS AVG	Aequitas 1		B1	2566	-	1	3.48
	<i>Issue 2</i>							
144	SALVS AVG	Salus 2		B1	2567	732	20	4.94, 4.05, 3.70, 3.61, 3.54, 3.50, 3.46, 3.37, 3.33, 3.29, 3.23, 2.92, 2.87, 2.79, 2.70, 2.65, 2.51, 2.44, 2.09, 1.94
	<i>Issue 3</i>							
145	PIETAS AVG veiled	Pietas 4		B1	2571	741	2	4.64, 3.77
*146	PIETAS AVG veiled	Pietas 4		GH	-	742	1	3.99
147	PIETAS AVG diademed	Pietas 4a		B1	2572	741	2	2.90, 2.65
	<i>Issue 4</i>							
*148	VICTORIA AVG	Victory 3a		B1	2575	744	2	4.91, 2.32
	TETRICUS II							
	Mint I (2)							
						<i>Normanby</i>	<i>Elmer</i>	
*149	C PIV ESV TETRICVS CAES SPES AVGG	Spes 1		C2	1533	791	2	3.11, 3.09
	C: CENTRAL EMPIRE, 270-93							
	AURELIAN AND SEVERINA							
	Lyon (6)							
	<i>Issue 1</i>					<i>Bastien</i>	<i>RIC</i>	
	<i>obv.</i> IMP C AVRELIANVS AVG							
150	PACATOR ORBIS	Sol 7	- - // C L	B1	3	6	2	4.05, 3.34
	<i>obv.</i> SEVERINA AVG							
151	CONCORD MILIT	Concordia 1a	- - // B L	E2	2	1	1	3.78
152	CONCORD MILIT	Concordia 1a	- - // D L	E2	4	1	1	4.10
	<i>Issue 3</i>							
	<i>obv.</i> IMP C AVRELIANVS AVG							
*153	PACATOR ORBIS	Sol 7	- - // A L	B1	7	6	1	4.22
	<i>obv.</i> SEVERINA AVG							
*154	CONCORD MILIT	Concordia 1a	- - // D L	E2	10	1	1	3.31
	Rome (63)					<i>Estiot</i>	<i>RIC</i>	
	<i>Issue 2</i>							
	<i>obv.</i> IMP AVRELIANVS AVG							
155	SOLI INVICTO	Sol 3	- - // Δ	B1	65	54	1	3.78

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
<i>Issue 3</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
156	PAX AVGVS TI	Pax 4b - - // B	B1	113	51	1 3.55
<i>Issue 4</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
157	VIRT MILITVM	Emperor and soldier I - - // T	B1	142	56	1 3.20
158	VIRT MILITVM	Emperor and soldier I - - // Q	B1	155	56	1 3.53
<i>Issue 6</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
*159	ORIENS AVG	Sol 4 - - // P	B1	283	—	4 4.82, 4.03, 3.77, 3.52
160	ORIENS AVG	Sol 4 - - // S	B1	296	—	2 4.47, 3.70
161	ORIENS AVG	Sol 4 - - // T	B1	308	—	2 4.71, 4.09
<i>obv. AVRELIANVS AVG</i>						
162	ORIENS AVG	Sol 4 - - // S	B1	409	—	2 4.72, 3.68
163	ORIENS AVG	Sol 4 - - // T	B1	444	—	1 3.41
164	ORIENS AVG	Sol 4 - - // V	B1	506	—	1 3.63
165	ORIENS AVG	Sol 4 - - // VI	B1	543	—	6 4.39, 3.82, 3.58, 3.55, 3.50, 3.33
<i>Issue 7</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
166	ORIENS AVG	Sol 9 - - // S	B1	587	62	2 4.41, 3.92
167	ORIENS AVG	Sol 9 - - // Q	B1	612	62	1 4.47
168	ORIENS AVG	Sol 9 - - // V	B1	622	62	1 3.83
169	ORIENS AVG	Sol 9 - - // [VI]	B1	643	62	1 4.32
170	ORIENS AVG	Sol 9 - - // VI	B1	643	62	3 4.02, 4.00, 3.68
171	ORIENS AVG	Sol 9 - - // VII	B1	672	62	1 3.15
172	ORIENS AVG	Sol 9 - - // VIII	B1	686	62	2 4.58, 4.38
173	ORIENS AVG	Sol 9 - - // VIII	B1	696	62	2 4.39, 4.36
174	ORIENS AVG	Sol 9 - - // X	B1	710	62	1 3.98
<i>obv. IMP C AVRELIANVS AVG</i>						
175	ORIENS AVG	Sol 9 - - // VII	B1	735	61	1 3.82
<i>Issue 8</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
176	ORIENS AVG	Sol 9 - Q // XXI	B1	785	62	1 3.80
<i>Issue 9</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
177	ORIENS AVG	Sol 9 - - // AXXI	B1	861	62	1 3.18
178	ORIENS AVG	Sol 9 - - // ΔXXI	B1	913	62	3 4.26, 3.82, 3.78
179	ORIENS AVG	Sol 9 - - // EXXI	B1	933	62	1 3.44
*†180	ORIENS AVG	Sol 9 - - // ZXXI	B1	966	62	1 4.91
181	ORIENS AVG	Sol 6 - - // XXIc	B1	—	63	1 3.43
<i>Issue 10</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
*182	ORIENS AVG	Sol 6a - - // AXXIR	B1	1008	63	1 4.11
183	ORIENS AVG	Sol 6a - - // ΔXXIR	B1	1049	63	1 2.69
<i>obv. SEVERINA AVG</i>						
184	CONCORDIA AVGG	Emperor and empress 2 - - // cXXIR	E2	1082	3	1 4.41
<i>denarius</i>						
<i>obv. SEVERINA AVG</i>						
185	VENVS FELIX	Venus 5 - Γ // VSV	E2	1103	6	1 2.95
<i>Issue 11</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
*186	ORIENS AVG	Sol 12 Γ - // XXIR	B1	1167	64	2 4.51, 2.80
187	ORIENS AVG	Sol 12 Δ - // XXIR	B1	1204	64	1 4.46
188	ORIENS AVG	Sol 12 II - // XXIR	B1	1293	64	1 3.71
189	ORIENS AVG	Sol 12 * - // XXIR	B1	1321	64	1 3.31
190	ORIENS AVG	Sol 12 I - // XXIR	B1	1333	64	1 3.56
<i>obv. SEVERINA AVG</i>						
*191	CONCORDIAE MILITVM	Concordia 3 - A // XXIR	E2	1356	4	2 4.27, 3.31
<i>denarii</i>						
<i>obv. IMP AVRELIANVS AVG</i>						
*192	VICTORIA AVG	Victory 3c - - // B	B1 ^v	1503	73	2 2.48, 2.19

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
	<i>obv.</i> SEVERINA AVG					
193	VENVS FELIX	Venus 5 -- // T	E2	1504	6	3 2.83, 2.78, 1.71
194	VENVS FELIX	Venus 5 -- // E	E2	1510	6	1 2.48
Milan (135)						
	<i>Issue 2</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
195	CONCORD LEGI	Concordia 3 -- // [P]?	D1	1580	117	1 2.74
*196	IOVI CONSERVATORI	Emperor and Jupiter 1c -- // P	D1	1623	131	1 4.53
197	IOVI CONSERVATORI	Emperor and Jupiter 1b -- // P	D1	1630	131	1 4.14
198	RESTITVT ORIENTIS	Emperor and female 1 -- // P	D1	1637	140	1 3.77
*199	CONCORDIA AVG	Emperor and Concordia 1 -- // S	D1	1667	119	1 2.93
200	VIRTVS MILITVM	Emperor and soldier 1 -- // T	D1	1738	147	1 3.38
*201	VICTORIA AVG	Victory 8 -- // -	D1	1777	143v	1 3.54
202	VICTORIA AVG	Victory 8 -- // T	D1	1778	143	1 3.12
	<i>Issue 3</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
203	FORTVNA REDVX	Fortuna 1 -- // P	B1	1833	128	6 4.42, 4.34, 3.10, 2.96, 2.87, 2.67
204	FORTVNA REDVX	Fortuna 1 -- // S	B1	1902	128	4 4.04, 3.42, 3.33, 3.28
205	FORTVNA REDVX	Fortuna 1 -- // T	B1	1973	128	4 4.88, 3.91, 3.49, 2.72
206	FORTVNA REDVX	Fortuna 1 -- // Q	B1	2061	128	3 4.24, 3.93, 2.99
207	FORTVNA REDVX	Fortuna 1 -- // ?	B1	1833ff	128	1 3.62
*208	IOVI CONSERVATORI	Emperor and Jupiter 1c -- // P	B1	2169	131	1 3.54
209	IOVI CONSERVATORI	Emperor and Jupiter 1b -- // P	B1	2178	131	3 3.90, 3.15, 3.14
210	IOVI CONSER	Emperor and Jupiter 1b -- // P	B1	2220	129	1 4.44
211	RESTITVT ORIENTIS	Emperor and female 1 -- // P	B1	2272	140	4 3.66, 3.60, 3.53, 3.17
*212	CONCORDIA MILITVM	Emperor and Concordia 1 -- // S	B1	2426	120	4 3.73, 3.67, 3.05, 2.83
*213	PIETAS AVG	Emperor and Pietas 1 -- // S	B1	2625	138	6 4.82, 3.57, 3.26, 3.23, 3.05, 2.43
214	VIRTVS MILITVM	Emperor and soldier 1 -- // T	B1	2720	147	7 4.13, 3.99, 3.71(2), 3.23, 2.81, 2.79
*215	ROMAE AETERNAE	Emperor and Roma 1 -- // Q	B1	2941	142	5 4.03, 3.91, 3.80, 3.14, 2.95
	<i>Issue 4</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
216	FORTVNA REDVX	Fortuna 1 -- // P	B1	3082	128	2 3.72, 3.28
*217	FORTVNA REDVX	Fortuna 1 -- // S	B1	3128	128	7 4.50, 3.94, 3.72, 3.68, 3.46, 3.26, 3.03
218	FORTVNA REDVX	Fortuna 1 -- // T	B1	3192	128	3 3.94, 3.42, 3.10
219	FORTVNA REDVX	Fortuna 1 -- // Q	B1	3264	128	3 3.90, 3.85, 3.68
220	FORTVNA REDVX	Fortuna 1 -- // [?]	B1	3388	128	1 3.58
221	IOVI CONSER	Emperor and Jupiter 1b -- // P	B1	3441	129	14 4.20, 4.10, 4.05, 3.72, 3.70, 3.63, 3.62, 3.61, 3.58, 3.52, 3.30, 3.25, 3.19, 2.65
222	RESTITVT ORBIS	Emperor and female 1 -- // P	B1	3705	139	3 3.45, 3.38, 2.95
223	RESTITVT ORBIS	Emperor and female 1 -- // [?]	B1	3805	139	1 3.09
224	CONCORDIA MILITVM	Emperor and Concordia 1 -- // S	B1	3815	120	9 3.89, 3.48, 3.37, 3.25, 3.11, 3.01, 2.73, 2.68, 2.29
225	PIETAS AVG	Emperor and Pietas 1 -- // S	B1	3956	138	8 4.07, 3.95, 3.68, 3.55, 3.30, 3.26, 3.06, 2.79
226	VIRT MILITVM	Emperor and soldier 1 -- // T	B1	4121	146	11 4.54, 3.66, 3.60, 3.57, 3.55, 3.54, 3.47, 3.45, 3.29, 3.26, 3.22
227	ROMAE AETER	Emperor and Roma 1 -- // Q	B1	4391	142	5 3.69, 3.61, 3.50, 3.16, 3.12

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
<i>Issue 5</i>								
<i>obv. AVRELIANVS AVG</i>								
228	ORIENS AVG	Sol 4	-- // P	B1	4581	135	3	3.99, 3.93, 3.26
229	ORIENS AVG	Sol 4	-- // T	B1	4638	135	4	4.01, 3.94, 3.93, 3.25
<i>Issue 6</i>								
<i>obv. IMP C AVRELIANVS AVG</i>								
230	ORIENS AVG	Sol 9	-- // P M	B1	4743	150	1	3.74
*231	ORIENS AVG	Sol 9	-- // T M	B1	4773	150	3	4.20, 4.15, 3.31
Ticinum (55)								
<i>Issue 1</i>								
<i>obv. IMP C AVRELIANVS AVG</i>								
232	ORIENS AVG	Sol 9	* - // QXXI	B1	4835	—	1	3.39
<i>Issue 2</i>								
<i>obv. IMP C AVRELIANVS AVG</i>								
233	ORIENS AVG	Sol 9	* - // SXXT	B1	4951	151	1	3.69
234	ORIENS AVG	Sol 9	* - // TXXT	B1	5005	151	1	4.17
*235	SOLI INVICTO	Sol 9	* - // TXXT	B1	5249	154	3	4.27, 4.25, 3.93
<i>Issue 3</i>								
<i>obv. IMP C AVRELIANVS AVG</i>								
236	ORIENS AVG	Sol 9	-- // SXXT	B1	5350	151	2	3.95, 3.35
237	ORIENS AVG	Sol 9	-- // QXXT	B1	5375	151	2	4.03, 3.26
238	SOLI INVICTO	Sol 9	-- // QXXT	B1	5424	154	1	4.12
<i>Issue 4</i>								
<i>obv. IMP C AVRELIANVS AVG</i>								
239	PROVIDEN DEOR	Fides and Sol I	-- // PXXT	B1	5438	152	7	4.58, 4.37, 4.28, 3.93, 3.76, 3.74, 3.49
240	PROVIDEN DEOR	Fides and Sol I	-- // SXXT	B1	5487	152	11	4.42, 4.23, 3.96(2), 3.93, 3.89, 3.87, 3.68, 3.62, 3.54, 3.28
241	PROVIDEN DEOR	Fides and Sol I	-- // TXXT	B1	5548	152	2	3.58, 3.54
242	PROVIDEN DEOR	Fides and Sol I	-- // QXXT	B1	5610	152	4	4.47, 4.55, 4.09, 3.95
<i>obv. SEVERINA AVG</i>								
*243	PROVIDEN DEOR	Fides and Sol I	-- // VXXT	E2	5675	9	4	5.59, 4.51, 4.29, 3.31
244	PROVIDEN DEOR	Fides and Sol I	-- // VIXXT	E2	5724	9	8	4.42, 4.31, 3.98, 3.96, 3.94, 3.74, 3.58, 3.54
<i>Issue 5</i>								
<i>obv. SEVERINA AVG</i>								
*†245	CONCORDIAE MILITVM	Concordia 3	-- // XXI	E2	5808	—	1	3.68
246	CONCORDIAE MILITVM	Concordia 3	-- // SXXT	E2	5832	8	2	3.82, 3.27
247	CONCORDIAE MILITVM	Concordia 3	-- // VIXXT	E2	5913	8	2	3.89, 3.30
*†248	CONCORDIAE MILITVM	Concordia 3	-- // IVXXT	E2	5918	8	2	4.07, 3.73
249	CONCORDIAE MILITVM	Concordia 3	-- // [?]XXT	E2	5920	8	1	3.63
Siscia (65)								
<i>Issue 1</i>								
<i>obv. IMP CAES L DOM AVRELIANVS AVG</i>								
*†250	CONCORD[IA MILI]	Concordia 7	-- // Q	D1	—	196	1	4.09
<i>Issue 2</i>								
<i>obv. IMP AVRELIANVS AVG</i>								
251	GENIVS ILLVR	Genius I	S - // -	B1	6033	223v	1	3.31
252	GENIVS ILLVR	Genius I	* - // S?	B1	6043	223	1	4.71
253	GENIVS ILLVR	Genius I	* - // S - // -	B1	6046	223v	1	3.11
<i>Issue 3</i>								
<i>obv. IMP AVRELIANVS AVG</i>								
254	FORTVNA REDVX	Fortuna I	-- // *P	B1	6057	220	1	3.94
255	FORTVNA REDVX	Fortuna I	-- // *S	B1	6107	220	2	5.54, 3.48
256	CONCORDIA AVG	Concordia I	-- // T*	B1	6240	213	1	4.01
<i>Issue 4</i>								
<i>obv. IMP AVRELIANVS AVG</i>								
257	IOVI CONSERVATORI	Emperor and Jupiter 1b	-- // *P	D1	6288	227	1	3.20
258	IOVI CONSERVATORI	Emperor and Jupiter 1b	-- // *T	D1	6322	227	1	2.39

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
259	IOVI CONSERVATOR I	Emperor and Jupiter Ib -- // *Q	D1	6333	227	1	3.02
260	VIRTVS AVG	Emperor and soldier 1 -- // *P	D1	6409	241v	1	3.49
261	VIRTVS MILITVM	Emperor and Mars 2 -- // *P	D1	6416	242	1	3.96
262	VIRTVS MILITVM	Emperor and Mars 2 -- // *S	D1	—	242	1	5.06
263	VIRTVS MILITVM	Emperor and Mars 2 -- // *Q*	D1	6428?	242	1	3.28
<i>Issue 5</i>							
<i>obv. IMP AVRELIANVS AVG</i>							
264	IOVI CONSER	Emperor and Jupiter Ib -- // *P	B1	6448	225	4	4.84, 3.63, 3.60, 3.17
*‡265	IOVI CONSER	Emperor and Jupiter Ib -- // *S	B1	6584	225	6	4.20, 4.13, 4.05, 3.86, 3.74, 3.53
‡266	IOVI CONSER	Emperor and Jupiter Ib -- // *T	B1	6692	225	1	3.65
‡267	IOVI CONSER	Emperor and Jupiter Ib -- // *Q	B1	6826	225	3	3.40, 3.34, 2.90
*‡268	IOVI CONSER	Emperor and Jupiter Ib -- // *Q	B1	—	225	1	3.91
269	VICTORIA AVG	Victory 6 -- *IT //	B1	6998	238	1	3.81
<i>Issue 6</i>							
<i>obv. IMP AVRELIANVS AVG</i>							
270	IOVI CONSER	Emperor and Jupiter Ib -- // [?]*	B1	7050	225	1	3.85
271	IOVI CONSER	Emperor and Jupiter Ib -- // *S	B1	7065	225	1	3.74
272	CONCORDIA MILITVM	Emperor and Concordia I -- // P*	B1	7201	216	1	3.64
273	CONCORDIA MILITVM	Emperor and Concordia I -- // *S	B1	7293	216	3	3.49, 3.40, 2.32
274	CONCORDIA MILITVM	Emperor and Concordia I -- // *T	B1	7440	216	5	3.99, 3.84, 3.80, 3.58, 3.32
275	CONCORDIA MILITVM	Emperor and Concordia I -- // *Q	B1	7526	216	2	4.22, 3.70
<i>Issue 7</i>							
<i>obv. IMP AVRELIANVS AVG</i>							
276	CONCORDIA MILITVM	Emperor and Concordia I -- // S*	B1	7679	244	1	3.00
277	CONCORDIA MILITVM	Emperor and Concordia I -- // T*	B1	—	244	1	2.78
278	CONCORDIA MILITVM	Emperor and Concordia I -- // *S	B1	7764	244	1	3.08
279	ORIENS AVG	Sol 6 * - // VI	B1	—	251	1	3.56
280	CONCORDIA MILITVM	Emperor and Concordia I -- // VI*	B1	8097	244	1	3.37
281	ORIENS AVG	Sol 9 * - // P	B1	8112	254	1	3.89
282	ORIENS AVG	Sol 9 * - // V	B1	8123	254	1	3.56
283	SOLI INVICTO	Sol 4 * - // Q	B1	8026	257	1	2.84
<i>Issue 8</i>							
<i>obv. IMP C AVRELIANVS AVG</i>							
284	CONCORDIA MILITVM	Emperor and Concordia I S // XXIS	B1	8176	244	1	3.59
285	CONCORDIA MILITVM	Emperor and Concordia I S // XXIT	B1	8200	244	1	4.01
286	CONCORDIA MILITVM	Emperor and Concordia I S // XXIQ	B1	8219	244	1	3.65
*287	ORIENS AVG	Sol 10 S - // XXIT	B1	8283	255	1	3.70
<i>Issue 9</i>							
<i>obv. IMP C AVRELIANVS AVG</i>							
*‡288	CONCORDIA MILITVM	Emperor and Concordia I -- // XX-I	B1	8303	244v	1	3.16
289	CONCORDIA MILITVM	Emperor and Concordia I -- // XXIP	B1	8304	244	1	3.74
290	CONCORDIA MILITVM	Emperor and Concordia I -- // XXIS	B1	8375	244	1	4.10
291	CONCORDIA MILITVM	Emperor and Concordia I -- // XX-IS	B1	8441	244	1	3.80
292	CONCORDIA MILITVM	Emperor and Concordia I -- // XXIV	B1	8595	244	1	3.93
293	CONCORDIA MILITVM	Emperor and Concordia I -- // VIXX-I	B1	—	244	1	3.75

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
294	ORIENS AVG	Sol 10	-- // XXIV	B1 8738	255	2 4.49, 4.01
295	ORIENS AVG	Sol 10	-- // XXIV	B1 8811	255	1 3.48
	'Balkan' mint (10)					
	<i>Issue 1</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
*296	IOVI CONSERVATORI	Emperor and Jupiter 1b	-- // dolphin	B1 8986	395	1 3.65
†297	CONCORDIA MILITVM	Emperor and Concordia 1	-- // [?]	B1 –	392v?	1 2.64
	<i>Issue 2</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
298	RESTITVTOR ORBIS	Emperor and female 1	-- // A	B1 9004	399	5 3.70, 3.48, 3.62, 3.45, 2.67
299	VIRTVS MILITVM <i>sic</i>	Emperor and soldier 1	-- // T	B1 9217	408	1 3.71
*300	IOVI CONSER	Emperor and Jupiter 1	-- // B	B1 9488	394	2 4.35, 3.46
	Serdica (6)					
	<i>Issue 4</i>					
	<i>obv.</i> IMP AVRELIANVS PF AVG					
*301	IOVI CONSER	Emperor and Jupiter 1b	-- // P	B1 9827	262v	1 3.24
	<i>obv.</i> IMP AVRELIANVS AVG					
302	IOVI CONSER	Emperor and Jupiter 1b	-- // S	B1 9834	260	2 3.60, 3.13
	<i>Issue 6</i>					
	<i>obv.</i> IMP C AVRELIANVS AVG					
303	ORIENS AVG	Sol 9	-- // P	B1 9899	278	1 3.81
	<i>obv.</i> IMP AVRELIANVS AVG					
304	ORIENS AVG	Sol 9	-- // S	B1 9921	279	1 3.85
	<i>Issue 8</i>					
	<i>obv.</i> AVRELIANVS AVG					
*305	RESTITVTOR ORBIS	Emperor and female 1	* // K A A	B1 9979	290v	1 4.12
	Cyzicus (12)					
	<i>Issue 5</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
*306	CONCORD MILIT	Emperor and Jupiter 1b	-- // * C *	B1 10168	342	1 4.33
307	RESTITVTOR ORIENTIS	Emperor and Orient(?) 1	-- // * C *	B1 10208	351	1 3.55
	<i>Issue 6</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
308	IOVI CONSER	Emperor and Jupiter 1b	-- // C * P	B1 10217	346	2 4.01, 3.85
309	RESTITVTOR ORIENTIS	Emperor and Orient(?) 1	-- // C * P	B1 10223	351	1 4.04
	<i>Issue 8</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
310	RESTITVTOR ORBIS	Emperor and female 1	-- // -	B1 10464	348v	3 4.87, 4.00, 3.44
	<i>obv.</i> IMP C AVRELIANVS AVG					
311	ORIENS AVG	Sol 9	-- // B C	B1 10601	363	1 3.00
312	ORIENS AVG	Sol 9	-- // Γ C	B1 10608	363	1 3.65
	<i>Issue 10</i>					
	<i>obv.</i> IMP AVRELIANVS AVG					
313	RESTITVTOR EXERCITI	Emperor and Mars 1	B // XXI	B1 10733	366	1 3.68
*†314	RESTITVTOR ORBIS	Emperor and female 1	B // XXI	D2 –	369	1 4.72
	TACITUS					
	Lyon (486)					
	<i>Issue 1</i>					
	<i>obv.</i> IMP C M CL TACITVS PF AVG					
*†315	AEQVITAS AVG	Aequitas 1		B11. 23	–	1 4.00
316	PAX PVBLICA	Pax 1		D1 30	44	8 4.52, 4.05, 3.94, 3.89, 3.57, 3.27, 3.12, 2.95
317	PROVID DEOR	Providentia 2		D1 37	48	5 4.44, 4.05, 3.85, 3.62, 3.54
318	VIRTVS AVG	Virtus 1		D1 45	67	1 3.94
	<i>obv.</i> IMP C M CL TACITVS AVG					

Bastien RIC

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
*319	AEQVITAS AVG	Aequitas I	G11.	18	13	1 3.75
320	AEQVITAS AVG	Aequitas I	D1	24	—	4 4.51, 4.44, 3.91, 3.86
321	VIRTUS AVG	Virtus I	D1	47	68	6 4.45, 4.45, 4.25, 4.19, 4.08, 3.62
<i>obv. IMP C CL TACITVS AVG</i>						
322	AEQVITAS AVG	Aequitas I	D1	26	14	10 4.81, 4.77, 4.57, 4.15, 4.11, 3.97, 3.89, 3.88, 3.64, 3.36
323	PAX PVBLICA	Pax I	D1	34	45	17 4.57, 4.40, 4.19, 4.12, 4.04, 3.99, 3.84(2), 3.75, 3.70, 3.66, 3.64, 3.57, 3.52, 3.52, 3.31, 2.86
324	PROVID DEOR	Providentia 2	D1	41	49	19 5.17, 4.77, 4.76, 4.68, 4.58, 4.57, 4.41, 4.33, 4.23, 4.07, 3.94, 3.86, 3.82, 3.73, 3.72, 3.66, 3.56, 3.44(2)
325	VIRTUS AVG	Virtus I	D1	48	69	12 4.72, 4.59, 4.03, 4.01, 3.94, 3.90, 3.70, 3.57, 3.09, 3.02, 2.83, 2.66
<i>Issue 3</i>						
<i>obv. IMP C M CL TACITVS AVG</i>						
326	SPES PVBLICA	Spes I	// CA	D1	62	— 1 3.30
327	PAX AVG	Pax 4	// DA	D1	65	— 1 4.03
<i>obv. IMP-CL-TACITVS-AVG</i>						
*328	SPES PVBLICA	Spes I	// CA	D1	Sup.63a	61 2 4.39, 3.58
<i>obv. IMP CL TACITVS AVG</i>						
329	FIDES MILITVM	Fides I	// BA	D1	57	27 17 4.97, 4.23, 4.18, 4.08, 4.03, 4.02, 4.01, 3.98, 3.96, 3.91, 3.85, 3.72, 3.66, 3.47, 3.44, 3.18(2)
*330	RESTITVTOR ORBIS	Emperor and female I	// BA	D1	60	55 2 3.70, 3.63
331	SPES PVBLICA	Spes I	// CA	D1	64	61 35 5.53, 4.88, 4.66, 4.64, 4.63, 4.61, 4.56, 4.51, 4.50, 4.45, 4.30, 4.17, 4.16, 4.15, 4.12, 4.12, 4.09, 4.04, 4.02, 3.91, 3.87, 3.83, 3.80, 3.79, 3.71(2), 3.68, 3.65, 3.64, 3.59, 3.57, 3.51, 3.43, 3.29, 2.89
<i>Issue 4</i>						
<i>obv. IMP C M CL TACITVS PF AVG</i>						
*332	FIDES MILITVM	Fides I	// BA	D1	70	25 1 3.38
<i>obv. IMP C M CL TACITVS AVG</i>						
333	TEMPORVM FELICITAS	Felicitas I	// AA	D1	68	64 1 3.56
*334	SPES PVBLICA	Spes I	// CA	D1	75	— 2 4.41, 3.42
<i>obv. IMP CL TACITVS AVG</i>						
*335	SPES PVBLICA	Spes I	// CA	D1	76	— 1 3.33
<i>Issue 5</i>						
<i>obv. IMP C M CL TACITVS AVG</i>						
336	TEMPORVM FELICITAS	Felicitas I	A	D1	77	64 3 3.93, 3.79, 3.73
337	TEMPORVM FELICITAS	Felicitas I	Δ	D1	84	(64) 1 4.33

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
	<i>obv. IMP CL TACITVS AVG</i>						
338	TEMPORVM FELICITAS	Felicitas I	A	DJ 78	65	65	5.34, 5.21, 5.07, 4.98, 4.87, 4.86, 4.67, 4.65, 4.62, 4.59, 4.54, 4.50(2), 4.48, 4.44, 4.38, 4.37, 4.36, 4.32, 4.31, 4.28, 4.27(2), 4.25, 4.24, 4.21, 4.17, 4.17, 4.16, 4.16(2), 4.15(2), 4.13, 4.06(2), 4.01, 3.93, 3.87(2), 3.86, 3.83, 3.79, 3.69, 3.68, 3.64, 3.64, 3.62(2), 3.61, 3.59, 3.57, 3.54, 3.51(2), 3.49, 3.39, 3.36, 3.34(2), 3.09, 3.07, 3.01, 2.76, 2.70
339	SALVS AVG	Salus 2	B	D1 80	—	1	3.80
340	MARS VICTOR		B	D1 79	30	26	5.11, 4.91, 4.90, 4.57, 4.57, 4.52, 4.50, 4.23, 4.08, 4.07, 4.06, 3.97, 3.88, 3.87, 3.86(2), 3.85, 3.71, 3.68, 3.66, 3.63, 3.62, 3.58, 3.53(2), 3.41
341	MARS VICTOR	Mars 2b	C	D1 81	30	4	4.77, 4.17, 4.12, 4.04
342	PAX AVG	Pax 4	Δ	D1 83	39	2	3.71, 3.37
343	TEMPORVM FELICITAS	Felicitas I	Δ	D1 85	65	40	4.85, 4.65, 4.55, 4.41, 4.40, 4.39(2), 4.33, 4.25(2), 4.18, 4.11, 4.10, 4.03, 3.99, 3.95, 3.94(2), 3.87, 3.82, 3.82(2), 3.76, 3.74, 3.73, 3.70, 3.67, 3.66, 3.65(2), 3.64, 3.61, 3.59, 3.54, 3.51, 3.45, 3.23, 3.20, 3.18(2)
	<i>Issue 6</i>			(A-Δ) - // -			
†344	TEMPORVM FELICITAS	Felicitas I	A	D1 86	—	1	4.21
345	TEMPORVM FELICITAS	Felicitas I	Δ	D1 91	—	1	4.38
	<i>obv. IMP CL TACITVS AVG</i>						
346	FELICITAS SAECVLI	Felicitas 6	C	D1 90	—	2	4.42, 3.64
	<i>Issue 7</i>			(A-Δ) * // -			
347	TEMPORVM FELICITAS	Felicitas I	A	D1 92	63	8	4.33, 4.09, 3.90, 3.82, 3.78, 3.71, 3.42, 3.06
348	MARS VICTOR	Mars 2b	B	D1 95	29	4	4.02, 3.76, 3.52(2)
349	PAX AETERNA	Pax 1b	B	D1 97	33	5	3.73, 3.68, 3.66, 3.55, 3.40
350	SPES PVBLICA	Spes I	B	D1 99	60	2	4.45, 4.19
351	FELICITAS SAECVLI	Felicitas 6	C	D1 101	21	9	4.23, 4.03, 4.01, 3.95, 3.87, 3.86, 3.78, 3.77, 3.42
*352	FELICITAS SAECILI	Felicitas 6	C	D1 101v	21v	1	3.47
353	TEMPORVM FELICITAS	Felicitas I	Δ	D1 108	63	14	4.32, 4.32, 4.09, 3.95, 3.90(2), 3.88, 3.78, 3.75, 3.55, 3.53, 3.36, 3.36, 3.14

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
354	TEMPORVM FELICITAS <i>obv.</i> IMP CL TACITVS AVG	Felicitas I	[]	D1	92/108	63	1 3.78
355	TEMPORVM FELICITAS	Felicitas I	A	D1	93	65	35 4.76, 4.48, 4.43, 4.27, 4.20, 4.19, 4.14, 4.10, 4.08, 4.05, 3.99, 3.94, 3.93, 3.91, 3.90, 3.89(2), 3.85, 3.85, 3.84, 3.80, 3.78, 3.71, 3.70, 3.68, 3.60, 3.59, 3.57, 3.55, 3.55, 3.53, 3.48, 3.40, 3.08, 3.02
356	MARS VICTOR	Mars 2b	B	D1	96	30	17 4.51, 4.50, 4.44, 4.35, 4.29, 4.20, 4.11, 4.09, 4.04, 4.02, 4.01, 3.93, 3.76, 3.69, 3.63, 3.54, 3.11
357	MARS VICTOR	Mars 2b	B	D1	100	30	6 4.05, 3.94, 3.91, 3.87, 3.52, 3.28
*358	MARS VICTOR	Mars 2b	B	D1	-	-	1 3.89
359	PAX AETERNA	Pax 1b	B	D1	98	34	6 4.40, 4.18, 4.12, 3.71, 3.66, 3.39
360	FELICITAS SAECVLI	Felicitas 6	C	D1	102	24	5 4.53, 4.29, 4.03, 3.81, 3.18
361	MARS VICTOR	Mars 2b	C	D1	103	30	15 4.79, 4.78, 4.27, 4.16, 4.02, 4.00, 3.96, 3.87, 3.87, 3.81, 3.80, 3.62, 3.58, 3.34, 3.13
362	SALVS AVG	Salus 2	C	D1	106	57	9 4.62, 4.41, 4.35, 4.24, 3.85, 3.83, 3.76, 3.72, 3.68
363	SALVS PVBLICA	Salus 2	C	D1	107	58	5 4.69, 4.19, 4.08, 3.85, 3.19
*364	TEMPORVM FELICITAS	Felicitas I	A	D1	109	65	29 4.46, 4.35, 4.31, 4.28, 4.21, 4.15, 4.09, 4.01, 3.97, 3.94(2), 3.92, 3.84, 3.83, 3.80, 3.79, 3.77(2), 3.69, 3.68, 3.67, 3.59, 3.58, 3.54, 3.50, 3.41, 3.38, 3.36, 3.07
<i>Issue 7</i>							
365	TEMPORVM FELICITAS <i>obv.</i> IMP CL TACITVS AVG	Felicitas I	[] * // []	D1	?	?	1 3.69
<i>Issue 8</i>							
366	TEMPORVM FELICITAS <i>obv.</i> IMP C M CL TACITVS PF AVG	Felicitas I	I	D1	110	63	5 4.03, 3.82, 3.52, 3.50, 3.39
367	MARS VICTOR	Mars 2b	II	D1	111	29	3 4.14, 3.87, 3.80
*368	PAX AETERNA	Pax 1b	III	D1	115	33	5 4.81, 4.30, 4.20, 4.01, 3.80
369	SPES PVBLICA	Spes 1	III	D1	118	60	1 3.82
370	PAX AVGVSTI walking	Pax 4	III	D1	116	43	3 3.49, 3.46, 3.41
371	PAX AVGVSTI	Pax 1	III	D1	120	-	2 3.92, 3.72
<i>Issue 9</i>							
*372	PAX AVGVSTI <i>obv.</i> IMP C M CL TACITVS PF AVG	Pax 1	- - // III	D1	123	-	1 3.39
Rome (90)							
<i>Issue 2</i>							
373	PROVIDENTIA AVG <i>obv.</i> IMP C M CL TACITVS AVG	Providentia 2	A	D1	7	92	7 4.13, 3.88, 3.69, 3.54, 3.39, 3.35, 3.28

Cat. No			Marks	Bust	RIC	Qty	Weight
374	VICTORIA AVG	Victory 1	A	D1	46	97	5 4.12, 3.98, 3.61, 3.48, 3.21
375	LAETITIA FVND	Laetitia 1	B	D1	59	89	10 4.51, 4.24, 4.16, 3.95, 3.89, 3.78, 3.78, 3.48, 3.47, 3.41
376	AEQVITAS AVG	Aequitas 1	F	D1	89	82	9 4.85, 4.79, 4.70, 4.14, 3.98, 3.79, 3.57, 3.02, 2.79
*377	SALVS AVG	Salus 1	Δ	D1	128	—	6 4.77, 4.42, 4.14, 3.96, 3.67, 3.45
378	SPES PVBLICA	Spes 1	E	D1	154	94	6 4.59, 4.33, 3.88, 3.79, 3.35, 3.28
379	SPES PVBLICA	Spes 1	- E // XXI	D1	185	94	1 2.79
380	FIDES MILITVM	Fides 1	ς	D1	190	87	8 4.76, 4.25, 3.98, 3.97, 3.89, 3.66, 3.54, 3.25
381	CLEMENTIA TEMP	Mars 1b	Z	D1	225	83	6 4.03, 3.87, 3.82, 3.70, 3.55, 2.74
*381A	CLEMENTIA TEMP Issue 3 obv. IMP C M CL TACITVS AVG	Mars 1b	- Z // XXI //XXI(A)	D1	251	83	1 3.47
382	PROVIDENTIA AVG	Providentia 2	A	A3	334	92	4 4.61, 4.15, 3.71, 3.53
383	PROVIDENTIA AVG	Providentia 2	A	D1	260	92	6 4.17, 4.05, 4.00, 3.83, 3.57, 3.54
384	LAETITIA FVND	Laetitia 1	B	D1	360	89	4 4.72, 3.93, 3.77, 3.66
385	AEQVITAS AVG	Aequitas 1	F	D1	503	82	3 4.67, 3.61, 3.58
386	AEQVITAS AVG	Aequitas 1	- F // XXI	D1	549	82	1 4.06
*387	SALVS AVG	Salus 1	Δ	A3	817	(93)	1 3.57
388	SALVS AVG	Salus 1	Δ	D1	619	(93)	2 4.07, 3.95
389	VBERTAS AVG	Ubertas 1	E	D1	869	95	1 3.61
390	FIDES MILITVM	Fides 1	ς	A3	1005	87	1 3.37
391	FIDES MILITVM	Fides 1	ς	B1	992	87v	1 3.67
392	FIDES MILITVM	Fides 1	ς	D1	939	87	4 5.44, 4.36, 4.29, 4.21
393	CLEMENTIA TEMP	Clementia 1	Z	A3	1080	84	1 3.91
394	CLEMENTIA TEMP	Clementia 1	Z	D1	1033	84	2 4.10, 3.84
Ticinum (66)							
Issue 1			//P etc				
obv. IMP C M CL TACITVS AVG							
395	VICTORIA AVG	Victory 6	P	D1	1271	170	2 4.02(2)
396	VICTORIA GOTTHI	Victory 1	P	D1	1280	172	1 3.94
397	MARTI PACIF	Mars 1b	S	D1	1285	145	1 3.47
*398	SALVS AVG	Salus 5a	T	D1	1307	(158)	1 3.60
399	SALVS PVBLI	Salus 2	T	D1	1329	160	2 3.99, 3.84
400	PROVIDE AVG	Providentia 1	Q	D1	1344	152	6 4.25, 4.17, 3.88, 3.81, 3.56, 3.41
401	ROMAE AETER	Roma 2	Q	D1	1378	156	2 3.70, 3.36
402	FELICIT TEMP	Felicitas 5	V	D1	1383	140	1 4.31
403	SECVRIT PERP	Securitas 2a	VI	D1	1455	163	2 3.62, 3.30
Issue 2			//P etc				
obv. IMP C M CL TACITVS AVG							
404	VICTORIA GOTTHI	Victory 1	P	B1	1554	172	1 3.99
*405	VICTORIA GOTTHI	Victory 1	P	B11.	1559	—	1 4.05
406	PAX AVGVSTI	Pax 1	P	B1	1489	150	11 4.36, 4.17, 3.92, 3.84, 3.70, 3.68, 3.44, 3.40, 3.29, 3.12, 3.10
407	MARTI PACIF	Mars 1b	S	B1	1606	145	2 3.84, 3.76
*408	MARTI PACIF	Mars 1b	S	B11.	1640	—	1 4.38
409	MARTI PACIF	Mars 1b	S	D1	1565	145	4 4.50, 4.49, 3.95, 3.94
*410	SALVS PVBLI	Salus 2	T	B1	1671	—	3 4.43, 4.14, 3.89

<i>Cur. No.</i>		<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty.</i>	<i>Weight</i>
411	SALVS PVBLI	Salus 2	T	D1	1642	160	2 3.74(2)
412	PROVIDE AVG	Providentia 1	Q	B1	1794	152	5 4.80, 4.35, 4.18, 3.87, 3.65
413	PROVIDE AVG	Providentia 1	Q	D1	1708	152	6 4.61, 4.55, 4.11, 3.99, 3.87, 3.60
414	FELICIT TEMP	Felicitas 5	V	B1	1880	140	3 4.23, 3.95, 3.30
*†415	FELICIT TEMP	Felicitas 5	V	B1	1923	140	1 4.43
416	FELICIT TEMP	Felicitas 5	V	D1	1854	140	4 4.52, 4.02, 3.80, 2.92
417	SECVRIT PERP	Securitas 2a	VI	B1	1950	163	3 4.61, 4.27, 3.54
418	SECVRIT PERP	Securitas 2a	VI	D1	1928	163	1 3.42
Siscia (4)							
<i>obv. IMP C M CLA TACITVS AVG</i>							
†419	AEQVITAS AVG	Aequitas 1	- P // -	D1	2012	181	1 3.63
*†420	PROVIDENTIA DEORVM	Providentia 2	-- // S	D1	2101	-	1 3.88
*†421	PAX AVG	Pax 1	-- // Q	D1	2204	-	1 4.19
<i>obv. IMP C M CL TACITVS P AVG</i>							
*†422	PAX AVGVSTI	Pax 1	- Q // -	D1	2228	-	1 4.09
Serdica (3)							
<i>obv. IMP C M CL TACITVS AVG</i>							
<i>Issue 1/2</i>							
*†423	CONSERVATOR MILITVM	Emperor and Mars 1	S // K A	C1	-	-	1 3.99
<i>Issue 3</i>							
424	PROVIDEN DEOR	Fides and Sol 1	-- // KAΔ	A3	2403	-	1 3.39
<i>obv. IMP C M CL TACITVS P AVG</i>							
<i>Issue 3</i>							
†425	PROVIDEN DEOR	Fides and Sol 1	-- // KAΔ	D1	2404	-	1 4.14
FLORIAN							
Lyon (31)							
<i>Issue 1</i>							
<i>obv. IMP C M AN FLORIANVS PF AVG</i>							
426	TEMPORVM FELICITAS	Felicitas 1c	-- // -	D1	124	-	1 3.55
*†427	VIRTVS AVGVSTI	Mars 2b	-- // -	D1	128	-	1 4.08
428	PACATOR ORBIS	Sol 7	-- // -	D1	129	7	1 3.33
429	AETERNITAS AVG	Aeternitas 2	-- // -	D1	131	2	1 3.48
<i>Issue 2</i>							
<i>obv. IMP C M AN FLORIANVS PF AVG</i>							
430	TEMPORVM FELICITAS	Felicitas 1c	-- // I	D1	134	11	1 4.21
431	VIRTVS AVGVSTI	Mars 2b	-- // II	D1	136	14	5 4.39, 4.14, 3.63, 3.55, 3.43
432	PACATOR ORBIS	Sol 7	-- // III	D1	137	7	3 4.02, 3.79, 3.43
433	AETERNITAS AVG	Aeternitas 2	-- // IIII	D1	141	2	7 4.16, 4.15, 4.15, 4.12, 3.81, 3.76, 3.48
<i>Issue 3</i>							
<i>obv. IMP C M AN FLORIANVS AVG</i>							
434	TEMPORVM FELICITAS	Felicitas 1c	-- // I	D1	146	12	1 3.68
435	VIRTVS AVGVSTI	Mars 2b	-- // II	D1	147	15	4 4.98, 4.25, 4.03, 4.01
436	PROVIDENTIA AVG	Providentia 2b	-- // III	D1	148	10	3 4.72, 4.42, 3.78
*437	VIRTVS AVGVSTI	Emperor 7	-- // IIII	D1	150	16	3 3.93, 3.66, 3.43
Rome (5)							
<i>obv. IMP C FLORIANVS AVG</i>							
438	PROVIDENTIA AVG	Providentia 2	-- // XXIA	D1	2439	37	1 3.81
439	LAETITIA FVND	Laetitia 1	-- // XXIB	D2	2475	34	1 3.71
*440	SALVS AVG	Salus 1	-- // XXIA	D1	2518	40	1 3.95
441	FIDES MILIT	Fides 2a	-- // XXIE	D1	2554	30	1 3.68
442	FIDES MILIT	Fides 2a	-- // XXIE	D2	2563	30	1 2.94

Cat. No			Marks	Bust		RIC	Qty	Weight
Siscia (4)								
obv. IMP C M AN FLORIANVS P AVG								
†443	FELICITAS AVG	Felicitas 6	- - // P	C2	2711	-	1	3.40
*†444	PROVIDEN DEOR	Fides and Sol I	- - // T	B1	-	-	1	3.92
†445	FELICITAS AVG	Felicitas 6	- - // V	D1	2843	61	1	3.90
*†446	PROVIDE AVG	Providentia I	- - // VI	D1	2885	82	1	3.74
PROBUS								
Lyon (856)								
Issue 1								
obv. IMP C M AVR PROBVS AVG								
*447	TEMPORVM FELICITAS	Felicitas 1c	- - // I	B1	151	52	7	4.67, 4.33, 4.28, 4.24, 3.74, 3.72, 3.38
*448	VIRTVS AVGVSTI	Mars 2b	- - // II	B1	152	58	6	4.29, 4.18, 4.09, 3.97, 3.86, 3.84
*449	PROVIDENTIA AVG	Providentia 2b	- - // III	B1	153	47	2	4.07, 4.00
450	VIRTVS AVGVSTI	Emperor 7	- - // IIII	B1	155	56	4	3.97, 3.63, 3.47, 3.42
Issue 2								
obv. IMP C M AVR PROBVS AVG								
*451	ORIENS AVG	Sol 9	- - // I	B1	164	44	12	5.72, 5.57, 5.07, 4.31, 4.30, 4.12, 3.95, 3.83, 3.80, 3.59, 3.56, 2.93
*452	SECVRTAS ORBIS	Securitas 2	- - // I	B1	165	49	5	4.22, 4.12, 3.95, 3.86, 3.75
453	MARS VICTOR	Mars 2b	- - // II	B1	166	37	20	4.71, 4.66, 4.55, 4.49, 4.43, 4.24, 4.21, 4.19, 4.15, 4.13, 4.03, 4.01, 3.92, 3.89, 3.82, 3.77, 3.75, 3.58, 3.49, 3.01
454	MARTI PACIFERO	Mars 7	- - // II	B1	167	42	3	3.31, 3.22, 3.20
455	FIDES MILITVM	Fides I	- - // III	B1	168	28	19	5.04, 4.70, 4.68, 4.51, 4.39, 4.37, 4.36, 4.10, 3.90, 3.89, 3.86, 3.85, 3.84, 3.79, 3.77, 3.76, 3.54, 3.24, 3.17
456	ORIENS AVG	Sol 12	- - // III	B1	169	45	4	4.39, 4.31, 3.99, 3.66
*457	PROVIDENTIA AVG	Providentia 1a	- - // III	B1	171	46	5	4.32, 4.28, 4.21, 3.87, 3.70
458	LAETITIA AVGVSTI	Laetitia 1	- - // IIII	B1	172	31	22	4.54, 4.45, 4.34, 4.20, 4.15, 4.14, 4.06, 4.02, 4.01, 4.00, 3.99, 3.97, 3.93, 3.88, 3.86, 3.76, 3.75(2), 3.65, 3.63, 3.62, 3.53
Issue 3								
obv. IMP C M AVR PROBVS AVG								
*459	TEMPORVM FELICITAS	Felicitas 1c	- - // I	B1	176	52	16	5.62, 5.05, 4.45, 4.35, 4.11, 4.11, 4.09, 4.08, 3.95, 3.93, 3.86, 3.81, 3.67, 3.58, 3.52, 3.52
460	MARS VICTOR	Mars 2b	- - // II	B1	179	37	24	5.56, 4.70, 4.47, 4.45, 4.29, 4.27, 4.18, 4.17, 4.09, 4.05, 4.04, 3.97, 3.85(2), 3.83, 3.82, 3.80, 3.77, 3.73, 3.68, 3.58, 3.54, 3.52, 3.40

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
461	FIDES MILITVM	Fides I	-- II III	B1	180	28	8	4.79, 4.70, 4.34, 4.23, 3.94, 3.74, 3.60, 3.21
462	MARS VICTOR	Mars 2b	-- II III	B1	181	37	1	3.74
*463	LAETITIA AVGVSTI	Laetitia I	-- II III	B1	182	31	24	5.28, 5.01, 4.51, 4.48, 4.37, 4.29, 4.22(2), 4.18, 4.17, 4.16, 4.11, 4.04, 3.90, 3.87, 3.83, 3.82, 3.71, 3.65, 3.54, 3.43, 3.37, 3.30, 3.06
Issue 4 <i>obv</i> IMP C PROBVS-PPF-AVG								
*464	ORIENS AVG	Sol 9	-- II I	B1	-	-	1	3.95
465	TEMPORVM FELICITAS	Felicitas Ic	-- II I	B1	186	53	10	5.06, 4.68, 4.17, 4.07, 4.06, 4.04, 4.03, 3.92, 3.85, 3.49
*466	TEMPOR FELICI	Felicitas Ic	-- II I	B1	188	104	44	5.54, 4.74, 4.65, 4.59, 4.58, 4.51, 4.41(2), 4.38, 4.26, 4.21(2), 4.20, 4.08, 4.03, 4.01, 3.93, 3.92(2), 3.90, 3.82, 3.80, 3.78, 3.73, 3.71, 3.67, 3.66, 3.62, 3.57(2), 3.52, 3.47(3), 3.45, 3.44, 3.37, 3.35, 3.34, 3.30, 3.27, 3.23, 3.10, 2.95
*467	MARS VICTOR	Mars 2b	-- II II	B1	190	38	73	4.85, 4.81, 4.74, 4.72, 4.66, 4.61, 4.57, 4.56(2), 4.54, 4.48, 4.47, 4.42, 4.40, 4.38, 4.30(3), 4.28, 4.28, 4.25, 4.24(3), 4.19, 4.14, 4.10, 4.06, 4.04(2), 4.02, 4.00, 3.99, 3.94, 3.91(2), 3.90, 3.90(2), 3.87, 3.86(2), 3.84, 3.83, 3.80(2), 3.78, 3.73, 3.72, 3.69, 3.68, 3.64(2), 3.63, 3.62, 3.62, 3.61, 3.60, 3.56(2), 3.55, 3.52, 3.48, 3.45, 3.40, 3.36, 3.37, 3.33(2), 3.29, 3.24, 3.15, 3.14
468	MARS VICTOR	Mars 2b	-- II [?]	B1	190/4	38	2	4.66, 3.93
*469	FIDES MILITVM	Fides I	-- II III	B1	192	29	20	4.62, 4.49, 4.44, 4.43, 4.25, 4.11, 4.07, 4.01, 3.91, 3.90, 3.89, 3.88, 3.83, 3.71, 3.69, 3.64, 3.63, 3.61, 3.42(2)
470	MARS VICTOR	Mars 2b	-- II III	B1	194	38	28	5.02, 5.02, 4.84, 4.41, 4.34, 4.29, 4.25, 4.19, 4.06, 4.05, 4.03, 3.98, 3.87, 3.86, 3.72, 3.72, 3.71, 3.65, 3.56, 3.54, 3.53, 3.52, 3.44, 3.43, 3.39, 3.30, 3.13, 2.87

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
*471	ABVNDANTIA AVG	Abundantia 1	-- // III	B1 195	17	51 4.97, 4.87, 4.68, 4.62, 4.58, 4.56(2), 4.51, 4.50, 4.49, 4.47, 4.37, 4.33, 4.29, 4.29, 4.28, 4.27, 4.25, 4.25, 4.23, 4.06, 4.04, 4.03, 4.02, 4.01, 4.00, 4.00, 3.93, 3.92, 3.91, 3.88, 3.86, 3.83(2), 3.82, 3.81, 3.78(3), 3.71, 3.69, 3.68, 3.68, 3.67, 3.63, 3.51, 3.49, 3.47, 3.39, 3.38, 3.25
472	LAETITIA AVGVSTI	Laetitia 1	-- // IIII	B1 198	32	11 4.51, 4.12, 4.00, 3.99, 3.75, 3.74, 3.70, 3.63, 3.54, 3.47, 3.25
<i>Issue 5</i>						
<i>obv. IMP C M AVR PROBVS AVG</i>						
*†473	ADVENTVS PROBI AVG	Emperor 1a	-- // I	H4l. Sup.II, 202α	–	1 4.10
†474	MARS VICTOR	Mars 2b	-- // II	F1 218	83	1 4.00
*†475	ABVNDANTIA AVG	Abundantia 1	-- // III	F1 249	59	1 3.72
†476	VIRTVS AVG	Virtus 7a	-- // III	H4l. 257	111	1 3.91
<i>obv. IMP C PROBVS PF AVG</i>						
†477	MARS VICTOR	Mars 2b	-- // III	H4l. 241	84	1 3.69
<i>obv. VIRTVS PROBI AVG</i>						
*†478	TEMPOR FELICI	Felicitas 1c	-- // I	H4l. 209	106	2 4.69, 4.22
*†479	TEMPOR FELICI	Felicitas 1c	-- // I	H5l. 210	106	1 4.33
*†480	TEMPOR FELICI	Felicitas 1c	-- // I	G1l. 211	106	1 4.37, 2.77
*†481	MARS VICTOR	Mars 2b	-- // II	H4l. 220	85	1 3.66
*†482	MARS VICTOR	Mars 2b	-- // III	G1 Sup.II, 244α	–	1 4.36
*†483	MARS VICTOR	Mars 2b	-- // III	H4l. 242?	–	1 3.76
*†484	MARS VICTOR	Mars 2b	-- // III	H7l. (243)	86v	2 4.64, 3.49
<i>Issue 6</i>						
<i>obv. IMP C M AVR PROBVS PF AVG</i>						
*485	FIDES MILITVM	Fides 1	-- // III	D2 276	78v	1 3.32
<i>obv. IMP C M AVR PROBVS AVG</i>						
*†486	TEMPOR FELICI	Felicitas 1c	-- // I	B1l. 267	–	1 4.55
487	TEMPOR FELICI	Felicitas 1c	-- // I	B1 266	103	6 4.34, 4.17, 3.96, 3.78, 3.55, 3.42
488	MARS VICTOR	Mars 2b	-- // II	D2 271	83	2 4.01, 2.82
*489	MARS VICTOR	Mars 2b	-- // III	D2 284	83	8 4.49, 4.05, 4.02, 3.95, 3.81, 3.72, 3.40, 3.34
†490	MARS VICTOR	Mars 2b	-- // III	B1 285	83	1 3.68
491	FIDES MILITVM	Fides 1	-- // III	D2 278	79	5 4.79, 4.35, 3.56, 3.39, 3.17
492	ABVNDANTIA AVG	Abundantia 1	-- // IIII	B1 291	59	2 3.88, 3.69
493	VIRTVS AVG	Virtus 7a	-- // IIII	B1 296	111	2 3.92, 3.70
<i>obv. IMP C PROBVS PF AVG</i>						
*494	TEMPOR FELICI	Felicitas 1c	-- // I	B1 269	104	32 5.20, 4.94, 4.61, 4.42, 4.39, 4.22(2), 4.21(3), 4.18(2), 4.12, 4.08, 4.07, 4.01, 3.96, 3.95, 3.89, 3.88(2), 3.83, 3.82, 3.80, 3.79, 3.78, 3.75, 3.71, 3.69, 3.63, 3.62, 3.52

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
495	MARS VICTOR	Mars 2b	- - // II	B1	274	84	2	3.96, 3.95
496	FIDES MILITVM	Fides 1	- - // III	B1	281	80	11	4.97, 4.62, 4.27, 4.16, 4.02(2), 3.99, 3.85, 3.37, 3.31, 3.31
497	MARS VICTOR	Mars 2b	- - // III	D2	286	-	1	3.91
498	MARS VICTOR	Mars 2b	- - // III	B1	287	84	17	4.48, 4.45, 4.31, 4.29, 4.09, 4.00, 3.95, 3.94, 3.83, 3.82, 3.75, 3.66, 3.62, 3.59, 3.58, 3.54, 3.30
499	ABVNDANTIA AVG	Abundantia 1	- - // IIII	B1	293	60	2	3.55, 3.51
*500	VIRTVS AVG	Virtus 7a	- - // IIII	B1	298	112	26	4.81, 4.60, 4.59, 4.50, 4.47, 4.30, 4.24, 4.17, 4.07, 4.02, 3.94, 3.92, 3.88, 3.81, 3.76, 3.75, 3.69(2), 3.67, 3.64, 3.64, 3.58, 3.52, 3.41, 3.39, 3.38
*501	VIRTVS AVG <i>obv. IMP C PROBVS P F AVG</i>	Virtus 7a	- - // IIII	B2	300	-	1	4.07
502	TEMPOR FELICI	Felicitas 1c	- - // I	B1	270	104	2	4.76, 3.74
*503	TEMPR FELICI <i>sic</i>	Felicitas 1c	- - // I	B1	270	104	1	3.67
*504	MARS VICTOR	Mars 2b	- - // II	B1	275	84	2	3.68, 2.91
505	MARS VICTOR <i>Issue 7</i> <i>obv. IMP C PROBVS-PF-AVG</i>	Mars 2b	- - // III	B1	288	84	3	3.83, 3.35, 3.18
*506	MARS VICTOR with captive	Mars 2d	- - // -	B1	312	-	3	4.33, 4.03, 3.63
*507	COMITI PROBI AVG <i>Issue 8</i> <i>obv. IMP C M AVR PROBVS PF AVG</i>	Minerva 4	- - // I	B1	315	69	4	4.35, 4.35, 3.39, 3.27
508	FELICIT TEMP <i>obv. IMP C M AVR PROBVS AVG</i>	Felicitas 5	- - // II	D2	345	73	1	3.23
*509	FELICIT TEMP <i>obv. IMP C PROBVS-PF-AVG</i>	Felicitas 5	- - // II	D2	346	74	5	4.13, 4.06, 3.79, 3.77, 3.76
510	COMES AVG	Minerva 4	- - // I	B1	342	65	2	3.50, 3.43
511	FELICIT TEMP	Felicitas 5	- - // II	B1	347	75	9	5.01, 4.38, 4.20, 4.10, 3.87, 3.80, 3.75, 3.74, 3.67
512	TEMPOR FELICIT	Felicitas 1c	- - // II	B1	350	107	2	3.73, 3.29
*513	PIAETAS AVG	Pietas 4	- - // III	B1	354	93	7	4.82, 4.22, 4.06, 3.97, 3.38, 3.32, 3.11
514	PIETAS AVG	Pietas 4	- - // III	B1	359	96	3	4.74, 3.97, 3.67
515	PAX AVG	Pax 1	- - // IIII	B1	366	91	7	5.82, 4.66, 4.14, 3.88, 3.86, 3.84, 3.82
*516	FELICIT TEMP <i>obv. IMP C PROBVS P F AVG</i>	Felicitas 5	- - // II	B1	348	75	3	4.15, 4.01, 3.88
*517	FELICIT TEMP <i>sic</i> <i>Issue 9</i> <i>obv. IMP C M AVR PROBVS PF AVG</i>	Felicitas 5	- - // II	B1	348v	75v	1	3.54
518	FELICIT TEMP	Felicitas 5	B - // -	D2	380	-	1	3.55
*519	SALVS AVG	Salus 1	- B // -	D2	Sup. II, 391α	122	1	3.52
520	COMES AVG <i>obv. IMP C M AVR PROBVS AVG</i>	Minerva 4	A - // -	D2	373	115	3	4.19, 3.87, 3.82
521	SALVS AVG	Salus 1	- B // -	D2	392	123	10	4.64, 4.61, 4.17, 4.12, 4.10, 4.07, 3.88, 3.83, 3.69, 3.56
*522	SALVS AVG	Salus 1	see note	D2	-	-	1	3.84
*523	SPES AVG	Spes 1a	C - // -	D2	402	127	10	4.26, 3.87, 3.85, 3.80, 3.77, 3.61, 3.56, 3.53, 3.51, 3.11

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
524 SPES AVG	Spes I	C - // -	D2 402	127	4	4.29, 3.98(2), 3.93,
†525 SPES AVG	Spes I	see note	D2 405	127	1	4.00
526 SPES AVG	Spes I	- C // -	D2 414	127	3	4.27, 3.52, 3.46
*†527 SPES AVG	Spes I	see note	D2 419	-	1	4.20
528 PAX AVG	Pax I	D - // -	D2 422	118	4	3.85, 3.69, 3.48, 3.28
<i>obv. IMP C PROBVS P F AVG</i>						
*529 COMES AVG	Minerva 4	A - // -	D1 374	116	6	4.61, 4.28, 4.09, 4.06, 3.57, 3.09
530 COMES AVG	Minerva 4	A - // -	B1 375	116	39	4.82, 4.73, 4.66, 4.65, 4.56, 4.51, 4.46, 4.14, 4.09, 4.07, 4.06, 4.02, 4.01(2), 4.00(2), 4.00, 3.95, 3.93, 3.92, 3.89, 3.85, 3.80, 3.79, 3.77, 3.77, 3.74, 3.71, 3.70, 3.68, 3.63, 3.62, 3.61, 3.55, 3.54, 3.47, 3.45, 3.24, 2.97
531 FELICIT TEMP	Felicitas 5	B - // -	B1 381	-	1	3.92
532 TEMPOR FELICIT	Felicitas 1c	B - // -	B1 386	129	33	5.68, 5.61, 4.91, 4.72, 4.53, 4.48, 4.44, 4.36, 4.34, 4.26, 4.19, 4.13, 4.12, 4.11, 4.10, 4.08, 4.07, 4.05, 4.01, 3.94(2), 3.87, 3.84, 3.75, 3.72, 3.66, 3.56, 3.52(3), 3.47, 3.35, 3.27
533 SALVS AVG	Salus 1	- B // -	D1 393	124	5	4.28, 3.97, 3.55, 3.47, 3.28
534 SALVS AVG	Salus 1	- B // -	B1 394	124	5	4.19, 4.10, 3.53, 3.31, 3.04
535 SPES AVG	Spes Ia	C - // -	D1 403	128	4	4.29, 3.92, 3.85, 3.83
536 SPES AVG	Spes I	C - // -	D1 403	128	2	4.27, 3.59
537 SPES AVG	Spes I	C - // -	B1 404	128	10	4.41, 4.28, 4.26, 4.25, 4.15, 3.99, 3.97, 3.85, 3.49, 3.33
†538 SPES AVG	Spes I	see note	D1 406	128	1	4.33
†539 SPES AVG	Spes I	see note	B1 407	128	1	3.97
†540 PAX AVG	Pax I	- C // -	B1 408	-	1	3.94
*541 PIETAS AVG	Pietas 4	- C // -	B1 410	120	19	4.69, 4.48, 4.46, 4.32(2), 4.31, 4.30, 4.27, 4.18, 4.15, 4.06, 4.04, 4.00, 3.81, 3.57, 3.53, 3.44, 3.40, 3.36
*†542 PIETAS AVG	Pietas 4	- C // -	D1 412	-	2	3.69, 3.38
543 PIETAS AVG	Pietas 4	- C // -	B1 413	121	18	4.40, 4.17(2), 4.08, 4.05, 4.02, 3.98, 3.91, 3.85, 3.73, 3.71, 3.68, 3.53, 3.52, 3.45, 3.44(2), 3.04
544 PAX AVG	Pax I	D - // -	D1 423	119	2	4.88, 3.82
545 PAX AVG	Pax I	D - // -	B1 424	119	50	5.99, 4.80, 4.73, 4.69, 4.51, 4.36, 4.28, 4.24, 4.24, 4.23, 4.22, 4.17, 4.16, 4.13, 4.08, 4.04, 4.03(2), 4.01(2), 4.01, 3.99, 3.94, 3.93(2), 3.92, 3.91, 3.88, 3.87, 3.86, 3.82, 3.82, 3.79, 3.76(2), 3.75(2), 3.73, 3.68, 3.65, 3.63, 3.61(2), 3.57(2), 3.49, 3.46, 3.36, 3.25, 3.07

Cat. No			Marks	Bust		RIC	Qty	Weight
546	PAX AVG	Pax 1	- D // -	D1	431	-	2	4.00, 3.51
*†547	PAX AVG <i>obv. IMP C PROBVS P F AVG</i>	Pax 1	see note	B1	438	-	1	3.69
548	COMES AVG	Minerva 4	A - // -	B1	376	116	1	4.16
*549	TEMPOR FELICIT <i>obv. IMP-PROBVS AVG</i>	Felicitas 1c	B - // -	B1	386	129	1	3.13
*†550	TEMPOR FELICIT	Felicitas 1c	B - // -	B1	389	-	1	3.76
Rome (199)								
						RIC		
<i>Issue 1</i> <i>obv. IMP C M AVR PROBVS AVG</i>								
†551	PROVIDENTIA AVG	Providentia 2	- - // XXIA	B1		726	6	4.73, 4.13, 3.66, 3.48, 3.32, 3.09
†552	CONSERVAT AVG	Sol 7	- B // XXI	B1		673	5	4.55, 4.16, 3.75, 3.64, 3.45
*†553	CONSERVAT AVG	Sol 7	- B // XXI	D1		673	1	3.90
†554	CONSERVAT AVG	Sol 7	- - // XXIB	B1		673	10	4.85, 4.49, 4.40, 4.33, 4.22, 4.06, 3.61, 3.37, 3.32, 2.98
555	AEQVITAS AVG	Aequitas 1	- Γ // XXI	B1		150	7	5.07, 3.79, 3.69, 3.63, 3.51, 3.37, 3.08
556	AEQVITAS AVG	Aequitas 1	- Γ // XXI	D2		150	1	4.14
557	AEQVITAS AVG	Aequitas 1	- - // XXII	B1		150	2	3.81, 3.23
†558	SALVS AVG	Salus 1	- - // ΔXXI	B1		744	3	4.42, 4.00, 3.54
*†559	SALVS AVG	Salus 1	- - // ΔXXI	D2		744	3	4.10, 3.72, 3.68
*†560	FIDES MILIT	Fides 6	- - // XXIe	B1		151	4	4.14, 4.04, 3.72, 3.57
†561	VIRTVS AVG	Emperor 2	- - // XXIe	B1		801	5	5.24, 4.43, 4.41, 4.25, 3.68
562	IOVI STATORI	Jupiter 2	- Z // XXI	B1		152	3	4.18, 3.04, 2.88
563	IOVI STATORI	Jupiter 2	- - // XXIZ	B1		152	1	3.18
<i>Issue 2</i>								
<i>obv. IMP C M AVR PROBVS PF AVG</i>								
*564	SOLI INVICTO	Sol in quadriga 1	- - // R	K4I.		-	1	4.06
*565	ROMAE AETERNAE <i>obv. IMP C M AVR PROBVS AVG</i>	Temple 2	- - // RΔ	B1		190	1	3.95
*566	VIRTVS AVGVSTI	Emperor 13	- - // R	D1		-	1	3.38
*†567	VIRTVS AVGVSTI	Emperor 13	- - // RB	D1		-	1	3.89
*568	VIRTVS AVGVSTI	Emperor 13	- - // RΔ	F1		-	1	4.30
*569	VIRTVS AVG <i>obv. VIRTVS PROBI AVG</i>	Virtus 1	- - // RΔ	D1		-	1	3.64
*†570	ROMAE AETERNAE	Temple 2	- - // RΔ	H4I.		196	1	4.25
<i>Issue 3</i>								
<i>obv. IMP C M AVR PROBVS PF AVG</i>								
*571	ADVENTVS PROBI AVG	Emperor 1a	Δ	B1		160	1	4.09
572	SOLI INVICTO <i>obv. IMP C M AVR PROBVS AVG</i>	Sol in quadriga 1	B	K4I.		204	1	3.59
573	ROMAE AETERNAE	Temple 2	ς	B1		-	1	4.11
*†574	ROMAE AETERNAE <i>obv. IMP PROBVS AVG</i>	Temple 2	Z	B1		-	1	3.67
575	ADVENTVS AVG	Emperor 1a	Γ	B1		157	1	4.47
576	ADVENTVS AVG	Emperor 1a	Δ	B1		157	1	3.63
577	ADVENTVS AVG	Emperor 1a	ς	B1		157	1	3.86
578	ADVENTVS AVG	Emperor 1a	ς	H4I.		157	2	4.88, 3.36
579	ROMAE AETER	Temple 2	Γ	B1		185	2	3.88, 3.81
580	ROMAE AETER	Temple 2	Γ	H4I.		185	1	3.72
581	ROMAE AETER	Temple 2	Γ?	K4I.		185	1	3.52
582	SOLI INVICTO	Sol in quadriga 2	ε	K4I.		202	1	3.60
83	VICTORIA GERM trophy	Trophy 1	A	B1		222	1	3.28
*584	VICTORIA GERM	Victory 12	Z	B1		219	1	3.11
<i>Issue 4</i>								
<i>obv. IMP PROBVS AVG</i>								
585	ADVENTVS AVG	Emperor 1a	ς	B1		157	1	3.33
*586	ADVENTVS AVG	Emperor 1a	ς	H4I.		157	1	3.97

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
587	ADVENTVS AVG	Emperor 1a	Z	B1	157	1 3.42
588	ROMAE AETER	Temple 2	ε	K41.	185	3 4.18, 4.02, 3.88
589	VICTORIA GERM	Trophy 1	A	B1	222	1 3.61
*†590	ADVENTVS AVG	Emperor 1a	ς	H41.	157	2 3.52, 3.25
	<i>Issue 5</i>	// <i>Rwreath</i> A				
	<i>obv. IMP PROBVS PF AVG</i>					
591	VICTORIA GERM	Trophy 1	A	B1	220	2 4.33, 3.85
592	SOLI INVICTO	Sol in quadriga 2	Γ	K41.	200	2 4.17, 3.69
593	ROMAE AETER	Temple 2	Δ	K41.	183	4 4.12, 3.56, 3.54, 3.51
*†594	FIDES MILITVM	Fides 1	ε	B1	169c.	2 4.17, 3.57
595	ADVENTVS AVG	Emperor 1a	Z	B1	155	2 3.80, 3.30
	<i>obv. IMP C PROBVS AVG</i>					
*596	VICTORIA GERM	Trophy 1	A	B1	221	3 4.32, 3.96, 3.67
597	ADVENTVS AVG	Emperor 1a	Z	B1	156	1 4.15
	<i>obv. IMP PROBVS AVG</i>					
598	VICTORIA GERM	Trophy 1	A	B1	222	2 5.25, 3.72
599	SOLI INVICTO	Sol in quadriga 2	B	K41.	202	1 2.96
600	ROMAE AETER	Temple 2	B	B1	185	2 5.01, 4.36
601	ROMAE AETER	Temple 2	Γ	H41.	185	1 4.18
602	ROMAE AETER	Temple 2	ε	K41.	185	1 4.35
603	VICTORIA AVG	Victory 4	ς	H41.	214	1 3.28
604	ADVENTVS AVG	Emperor 1a	Z	B1	157	1 3.79
	<i>Issue 5/6</i>	<i>uncertain symbol</i>				
	<i>obv. IMP PROBVS PF AVG</i>					
*†605	FIDES MILITVM	Fides 1	ε	B1	(-)	1 3.99
	<i>Issue 6</i>	// <i>Rfulmen</i> A				
	<i>obv. IMP PROBVS PF AVG</i>					
606	VICTORIA GERM	Trophy 1	A	B1	220	4 4.58, 4.49, 3.60, 3.49
*607	IOVI CONS PROB AVG	Jupiter 1	B	B1	173	4 4.28, 3.41, 2.92, 2.74
608	SOLI INVICTO	Sol in quadriga 2	Γ	B1	200	1 4.12
609	SOLI INVICTO	Sol in quadriga 2	Γ	K41.	200	10 4.00, 3.96, 3.87, 3.82, 3.81, 3.75, 3.69(2), 3.29, 3.23
*†610	ROMAE AETER	Temple 2	Δ	K41.	183v	13 4.42, 4.34, 4.20, 4.02, 4.00, 3.81, 3.64, 3.32, 3.31(2), 3.13, 3.11, 2.85
*†611	FIDES MILITVM	Fides 1	ε	B1	169c.	5 4.15, 4.09, 3.85, 3.54, 3.48
†612	VICTORIA AVG	Victory 4	ς	B1	213c.	1 3.47
613	ADVENTVS AVG	Emperor 1a	Z	B1	155	3 4.30, 3.95, 3.54
	<i>obv. IMP C PROBVS AVG</i>					
†614	ROMAE AETER	Temple 2	ε	K41.	184v	1 3.50
†615	SOLI INVICTO	Sol in quadriga 2	ε	K41.	201v	1 4.32
	<i>obv. IMP PROBVS AVG</i>					
616	VICTORIA GERM	Trophy 1	A	B1	222v	1 4.02
*617	ADVENTVS AVG	Emperor 1a	Γ	H41.	157	1 4.14
618	ROMAE AETER	Temple 2	Δ	K41.	185	1 3.92
*619	SOLI INVICTO	Sol in quadriga 2	ε	K41.	202	1 3.32
620	ADVENTVS AVG	Emperor 1a	ς	B1	157	1 3.48
621	ADVENTVS AVG	Emperor 1a	ς	H41.	157	1 3.71
622	ADVENTVS AVG	Emperor 1a	Z	B1	157	2 4.98, 3.28
	<i>obv. PROBVS PF AVG</i>					
623	VICTORIA GERM	Trophy 1	A	B1	223	4 4.29, 3.81, 3.65, 3.56
624	SOLI INVICTO	Sol in quadriga 2	Γ	K41	203	6 4.50, 4.43, 4.00, 3.40, 3.37, 3.30
625	ROMAE AETER	Temple 2	Δ	K41.	187	4 4.25, 4.17, 4.14, 2.99
626	FIDES MILITVM	Fides 1	ε	B1	170	6 4.20, 4.03, 3.93, 3.84, 3.70, 3.17
*627	VICTORIA AVG	Victory 4	ς	B1	215	3 4.24, 4.10, 3.83
†628	ADVENTVS AVG	Emperor 1a	Z	B1	158c	3 3.66, 3.64, 3.37
	<i>Issue 7</i>	'Aequiti' series				
	<i>obv. PROBVS PF AVG</i>					
*629	VICTORIA GERM	Trophy 1	RAA	B1	223	1 4.20

Cat. No			Marks	Bust	RIC	Qty	Weight
630	IOVI CONS PROB AVG	Jupiter 1	REB	B1	175v	2	4.09, 2.91
*631	MARTI PACIF	Mars 1b	RQI	B1	177	2	3.84, 3.59
*632	ROMAE AETER	Temple 2	RVΔ	K4L	187v	3	4.88, 4.28, 3.47
633	FIDES MILITVM	Fides 1	RIE	B1	170	2	3.61, 3.43
634	VICTORIA AVG	Victory 4	RTς	B1	215	1	4.74
635	ADVENTVS AVG	Emperor 1a	RIZ	B1	158	1	3.56
*636	AETERNITAS AVG	Sol 3	RIZ	B1	168	1	3.06
Ticinum (234)					RIC		
Issue 1		(20mm dies)					
obv. IMP C M AVR PROBVS AVG							
637	PRINCIPI IVVENTVT	Prince 1b	-- // PTI	D2	318	1	3.86
638	PROVIDEN AVG	Providentia 2b	-- // STI	D2	319	2	4.18, 3.65
639	IOVI CONSERVAT	Jupiter 1	-- // TTI	D2	315	1	4.14
*640	PERPETVITATE AVG	Perpetuitas 1	-- // [Q]TI	D2	317	1	3.56
641	CONCORDIA EXERCI	Concordia 3	-- // VITI	D2	313	1	4.28
Issues 2-5: Series with Latin off. Marks							
Issue 2		(20-21mm dies)					
obv. IMP C M AVR PROBVS AVG							
642	CONCORD MILIT	Emperor and Concordia 1	-- // PXXT	B1	332	4	4.51, 3.96, 3.67, 3.39
643	CONCORD MILIT	Emperor and Concordia 1	-- // PXXT	D2	332	10	4.66, 4.50, 4.45(2), 4.38, 4.26, 3.67, 3.51, 3.46, 3.39
*644	CONCOR MILIT	Emperor and Concordia 1	-- // PXXT	D2	332v	1	3.96
*645	CONCORD MILITV	Emperor and Concordia 1	-- // [P]XXT	D2	340v	1	3.42
646	CONCORD AVG	Concordia and Sol 1	-- // SXXT	B1L	323	1	3.69
647	CONCORD AVG	Concordia and Sol 1	-- // SXXT	D2	323	3	4.40, 4.00, 3.80
648	FELICITAS SEC	Felicitas 1	-- // SXXT	B1	359	1	4.15
649	FELICITAS SEC	Felicitas 1	-- // SXXT	B1	359	4	4.18, 4.07, 3.81, 3.41
650	CONSERVA AVG	Sol 3	-- // TXXT	D2	348	2	4.52, 3.90
*651	CONSERVAT AVG	Sol 3	-- // TXXT	B1	348	3	4.35, 4.15, 3.74
*652	CONSERVAT AVG	Sol 3	-- // TXXT	D2	348	5	7.72, 4.69, 4.36, 3.82, 3.70
*653	VIRTVS AVG	Virtus 7a	-- // QXXI	B1	435	2	3.81, 2.98
*654	VIRTVS AVG	Virtus 7a'	-- // QXXI	B1	435	1	3.71
655	IOVI CONSERVAT	Emperor and Jupiter 1b	-- // VXXT	D2	386	4	4.43, 4.18, 4.02, 3.61
656	IOVI CONSERVA	Emperor and Jupiter 1b	-- // VXXT	D2	386	1	4.40
657	IOVI CONSERVA	Emperor and Jupiter 1b	-- // VXXT	B1	386	2	4.05, 3.78
*658	FIDES MILIT	Fides 1	-- // VIXXT	B1	364	1	3.79
659	FIDES MILIT	Fides 1	-- // VIXXT	D2	364	1	4.00
660	RESTITVT SAEC	Emperor and Victory 1	-- // VIXXT	D2	401	1	4.25
*661	RESTITVT SEC	Emperor and Victory 1	-- // VIXXT	D2	401	1	3.45
Issue 3		(21mm dies)					
obv. IMP C M AVR PROBVS AVG							
662	ERCVLI PACIFERO	Hercules 3	-- // SXXT	K4L	374	1	4.05
663	FELICITAS SEC	Felicitas 1	-- // SXXT	K4L	359	1	3.42
664	CONSERVAT AVG	Sol 3	-- // TXXT	G3L	348	1	3.62
*665	IOVI CONSERVAT	Emperor and Jupiter 1b	-- // VXXT	G3L	386	1	3.72
*666	FIDES MILIT	Fides 1	-- // VIXXT	K4L	364	1	4.00
obv. VIRTVS PROBI AVG		(21-22mm dies)					
*667	CONCORD MILI	Emperor and Concordia 1	-- // PXXT	H4L	327	1	4.07
*668	CONCORD MILIT	Emperor and Concordia 1	-- // PXXT	H5L	336	1	3.68
*669	FELICITAS SEC	Felicitas 1	-- // SXXT	G1L	361	1	3.73
*670	CONSERVAT AVG	Sol 3	-- // TXXT	F4	351	1	3.54
*671	CONSERVAT AVG	Sol 3	-- // TXXT	G3L	351	1	4.87
*672	CONSERVAT AVG	Sol 3	-- // TXXT	H4L	351	1	3.33

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
673	CONSERVAT AVG	Sol 3	-- // TXXT H4l.	351	1	4.10
674	VIRTVS AVG	Virtus 7a	-- // QXXT F2l.	437	1	4.00
*675	VIRTVS AVG	Virtus 7a	-- // QXXT H4l.	437	1	3.75
*†676	VIRTVS AVG	Virtus 7a	-- // QXXT L4l.	cl437	1	4.90
677	IOVI CONSERVAT	Emperor and Jupiter 1b	-- // VXXT G1l.	388	1	3.75
678	FIDES MILIT	Fides l	-- // VIXXT G3l.	366	2	3.64, 3.19
*679	FIDES MILIT	Fides l	-- // VIXXT H4l.	366	1	4.04
*†680	FIDES MILIT	Fides l	-- // VIXXT H4l.	366	1	3.07
*681	FIDES MILIT	Fides l	-- // VIXXT H5l.	366	1	3.71
	<i>Issue 4</i>					
	<i>First phase</i>		(21mm dies)			
	<i>obv. IMP C PROBVS P F AVG</i>					
*682	CONSERVAT AVG	Sol 3	-- // TXXT B1	349	2	4.11, 2.82
*683	FIDES MILIT	Fides l	-- // VIXXT B1	365	1	4.11
	<i>obv. IMP C PROBVS P F AVG</i>					
*684	CONCORD MILIT	Emperor and Concordia l	-- // PXXT B1	333	2	4.63, 3.91
*685	CONCORD MILIT	Emperor and Concordia l	-- // PXXT K4l.	333	2	4.17, 4.01
686	FELICITAS SEC	Felicitas l	-- // SXXT B1	360	1	4.10
687	CONSERVAT AVG	Sol 3	-- // TXXT B1	349	1	3.84
	<i>obv. IMP C PROBVS P F AVG</i>					
*688	ERCVLI PACIF	Hercules l	-- // VIXXT B1	375	1	3.92
	<i>Second phase</i>		(20mm dies)			
	<i>obv. IMP C M AVR PROBVS P F AVG</i>					
*†689	FIDES MILIT	Fides l	-- // VIXXT B1	363	1	3.67
	<i>obv. IMP C PROBVS P F AVG</i>					
*690	VIRTVS AVG	Mars 2b	-- // PXXT B1	428	1	3.64
*691	ERCVLI PACIF	Hercules l	-- // SXXT K4l.	375	1	3.55
692	CONSERVAT AVG	Sol 3	-- // TXXT B1	349	3	4.20, 3.62, 3.43
693	VIRTVS AVG	Virtus 7a	-- // QXXT B1	436	2	4.67, 3.36
694	VIRTVS AVG	Virtus 7a	-- // QXXT K4l.	436	1	3.45
695	IOVI CONSERVAT	Emperor and Jupiter 1b	-- // VXXT K4l.	387	1	4.22
696	ERCVLI PACIF	Hercules l	-- // VXXT K4l.	375	2	3.73, 3.04
*697	PAX AVG	Pax l	-- // VXXT B1	-	1	3.73
698	FIDES MILIT	Fides l	-- // VIXXT B1	365	4	4.40, 3.69, 3.52, 3.41
	<i>obv. VIRTVS PROBI AVG</i>					
699	VIRTVS AVG Mars	Mars 2b	-- // PXXT L4l.	430	1	3.68
*†700	ERCVLI PACIF	Hercules l	-- // SXXT L2l.	-	1	3.97
†701	VIRTVS AVG	Virtus 7a	-- // QXXT F2l.	437	1	3.96
*†702	FIDES MILIT	Fides l	-- // VIXXT G1l.	366	1	4.13
703	FIDES MILIT	Fides l	-- // VIXXT H4l.	366	1	3.90
	<i>Issue 5</i>		(20mm dies)			
	<i>obv. IMP C PROBVS AVG</i>					
*704	CONSERVAT AVG	Sol 3	-- // TXXT B1	350	1	3.72
	<i>Issue 6</i>					
	<i>Series with Greek off. marks</i>					
	<i>a): no mark of value</i>		(20mm dies)			
	<i>obv. IMP C PROBVS P F AVG</i>					
*705	PAX AVG	Pax l	-- // € (?) K4l.	-	1	3.70
	<i>obv. IMP C PROBVS AVG</i>					
*706	MARTI PACIF	Mars 1b	Δ - // - B1	-	1	3.74
*707	SECVRIT PERPE	Securitas 2a	ς - // - B1	-	1	3.93
	<i>b): with XXI</i>		(20mm dies)			
	<i>obv. IMP C PROBVS P F AVG</i>					
708	CONCORD MILIT	Concordia 3	-- // AXXI B1	531	2	4.48, 4.12
709	SALVS AVG	Salus 5	-- // AXXI B1	562	2	4.57, 3.92
710	PROVIDENT AVG	Providentia l	-- // BXXI K4l.	551	1	4.06
711	SALVS AVG	Salus 2	-- // TXXI B1	556	1	4.09
712	SALVS PVBLIC	Salus 2	-- // TXXI B1	567	1	3.76
713	MARTI PACIF	Mars 1b	-- // ΔXXI B1	541	3	4.29, 3.74, 3.53
714	SECVRIT PERP	Securitas 2a	-- // ςXXI B1	572a	1	2.91

Cat. No			Marks	Bust	RIC	Qty	Weight
	<i>obv. IMP C PROBVS AVG</i>						
715	CONCORD MILIT	Concordia 3	- - // AXXI	B1	532	1	3.34
*716	SALVS AVG	Salus 5	- - // AXXI	B1	563	3	4.48, 3.70(2)
717	PROVIDENT AVG	Providentia 1	- - // BXXI	B1	552	1	3.44
718	SALVS PVBLIC	Salus 2	- - // I'XXI	B1	568	3	4.33, 3.79, 3.25
719	PAX AVG	Pax 1	- - // eXXI	B1	547	1	3.69
720	SECVRIT PERP	Securitas 2a	- - // sXXI	B1	573	2	3.64, 3.55
	<i>obv. VIRTVS PROBI AVG</i>						
*721	SALVS PVBLIC	Salus 2	- - // I'XXI	G11.	569	1	3.80
	<i>Issue 7</i>						
	<i>'AEQVIT' series</i>		(20mm dies)				
	<i>obv. VIRTVS PROBI AVG</i>						
*722	MARTI PACIF	Mars 1b	V - // QXXI	H41.	472	1	3.73
	<i>Issues 8-9: 'EQVITI' series</i>		(20mm dies)				
	<i>Issue 8</i>						
	<i>obv. IMP C M AVR PROBVS AVG CONS III</i>						
*723	SALVS AVG	Salus 2	V - // TXXI	K41.	502	1	4.55
*724	SECVRIT PERP	Securitas 2a	- I // VIXXI	K41.	(528)	1	3.68
	<i>obv. IMP C M AVR PROBVS P F AVG</i>						
*725	SECVRIT PERP	Securitas 2a	- I // VIXXI	K41.	(522)	1	4.62
	<i>obv. IMP C M AVR PROBVS AVG</i>						
726	PROVIDENT AVG	Providentia 1	Q - // SXXI	K41.	488	2	4.68, 4.27
*727	SECVRIT PERP	Securitas 2a	- I // VIXXI	K41.	(523)	1	4.61
	<i>Issue 9</i>						
	<i>obv. IMP C PROBVS AVG CONS IIII</i>						
728	SALVS AVG	Salus 2	V - // TXXI	K41.	521	1	3.47
729	MARTI PACIF	Mars 1b	I - // QXXI	K41.	513	1	4.15
	<i>obv. IMP C PROBVS P F AVG</i>						
730	CONCORD MILIT	Concordia 3	E - // PXXI	K41.	479	2	4.00, 3.78
731	PROVIDENT AVG	Providentia 1	Q - // SXXI	K41.	489	3	4.19, 4.07, 3.51
732	SECVRIT PERP	Securitas 2a	I - // VIXXI	K41.	524	1	3.57
	<i>obv. IMP C PROBVS AVG</i>						
733	CONCORD MILIT	Concordia 3	E - // PXXI	K41.	480	7	4.41, 4.23, 4.18, 4.07, 3.67, 3.50, 3.16
734	PROVIDENT AVG	Providentia 1	Q - // SXXI	K41.	490	3	4.71, 3.98, 3.67
735	SALVS AVG	Salus 2	V - // TXXI	B1	499	1	3.76
736	SALVS AVG	Salus 2	V - // TXXI	K41.	499	4	4.19, 4.11, 3.77, 3.59
737	MARTI PACIF	Mars 1b	I - // QXXI	K41.	508	3	3.71, 3.39, 3.32
738	PAX AVGVSTI	Pax 1	T - // VXXI	K41.	516	5	4.24, 4.10, 3.58, 3.37, 3.28
739	PAX AVG	Pax 1	T - // VXXI	K41.	516	1	4.76
*740	SECVRIT PERP	Securitas 2a	I - // VIXXI	B1	-	1	3.81
741	SECVRIT PERP	Securitas 2a	- I // VIXXI	K41.	525	5	4.37, 4.22, 4.12, 3.95, 3.85
	<i>obv. VIRTVS PROBI INVICTI AVG</i>						
*742	MARTI PACIF	Mars 1b	I - // QXXI	H11.	482	1	3.10
	<i>obv. VIRTVS PROBI AVG</i>						
743	CONCORD MILIT	Concordia 3	E - // PXXI	H41.	481	6	4.26, 4.05, 4.01, 3.94, 3.69, 3.01
*744	PROVIDENT AVG	Providentia 1	Q - // SXXI	H41.	491	7	3.83, 3.81, 3.80, 3.68, 3.63, 3.62, 3.51
745	SALVS AVG	Salus 2	V - // TXXI	H41.	500	4	4.34, 3.81, 3.76, 3.65
746	MARTI PACIF	Mars 1b	I - // QXXI	H41.	509	8	5.35, 5.31, 5.24, 4.21, 3.84, 3.82, 3.80, 3.62
747	PAX AVGVSTI	Pax 1	T - // VXXI	H41.	517	3	4.45, 4.24, 3.85
748	PAX AVG	Pax 1	T - // VXXI	H41.	517	1	3.14
749	SECVRIT PERP	Securitas 2a	- I // VIXXI	H41.	526	2	3.84, 3.55
	<i>'Issue 10: 'EQVITI' series with star</i>		(20mm dies)				
	<i>obv. IMP C PROBVS AVG</i>						
*750	CONCORD MILIT	Concordia 3	E * // PXXI	K41.	480	7	4.48, 4.34, 3.86, 3.73, 3.63, 3.48, 3.46

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
751	PROVIDENT AVG	Providentia 1	Q * // SXXI	K41.	490	1 3.52
752	SALVS AVG	Salus 2	V * // TXXI	K41.	499	3 4.55, 4.08, 3.93
753	MARTI PACIF	Mars 1b	I * // QXXI	K41.	508	1 3.54
754	PAX AVGVSTI	Pax 1	T * // VXXI	K41.	516	2 4.00, 3.44
755	SECVRIT PERP	Securitas 2a	* I // VIXXI	K41.	525	3 3.38, 3.30, 2.70
	<i>obv. VIRTVS PROBI AVG</i>					
756	PROVIDENT AVG	Providentia 1	Q * // SXXI	H41.	491	2 4.01, 3.52
*757	PAX AVGVSTI	Pax 1	T * // VXXI	H41.	517	2 4.45, 3.79
758	SECVRIT PERP	Securitas 2a	* I // VIXXI	H41.	526	1 3.86
	<i>Siscia (44)</i>					
	<i>Issue 1</i>					
	<i>obv. IMP C M AVR PROBVS AVG</i>					
759	FELICITAS AVG	Felicitas 1	- Δ // XXI	D2	682	1 3.80
*760	FELICITAS AVG	Felicitas 6	- ε // XXI	D2	675	1 3.81
761	CONCORD MILIT	Emperor and Concordia 1	Γ // XXI	D2	651	2 3.80, 3.65
	<i>Issue 2A</i>					
	<i>obv. IMP C M AVR PROBVS PF AVG</i>					
762	ADVENTVS PROBI AVG	Emperor 1a	Γ // XXI	K41.	632	1 3.74
*†763	SOLI INVICTO	Sol in quadriga 1	Δ // XXI	K41.	-	2 3.74, 3.62
	<i>Issue 2B</i>					
	<i>obv. IMP PROBVS INV AVG</i>					
*†764	FELICITAS AVG	Felicitas 6	- A // XXI	B1	-	1 4.09
765	PROVIDENTIA AVG N	Providentia 2	- - // XXI	B1	727	1 3.54
	<i>Issue 3</i>					
	<i>obv. IMP C M AVR PROBVS PF AVG</i>					
766	SOLI INVICTO	Sol in quadriga 1	- - // XXIB	K41.	776	1 3.33
	<i>Issue 4</i>					
	<i>obv. IMP C M AVR PROBVS PF AVG</i>					
*†767	VIRTVS PROBI AVG	Trophy 1	- - // XXIT	J71.	cf820	1 3.86
	<i>obv. IMP C M AVR PROBVS P AVG</i>					
*768	P M TR P COS PP	Emperor 14	- - // XXIS	G21.	609v	1 4.80
	<i>Issue 5</i>					
	<i>obv. IMP C M AVR PROBVS PF AVG</i>					
769	VIRTVS PROBI AVG	Mars 2b	- - // XXIVI	G11.	810	1 3.80
770	VIRTVS PROBI AVG	Mars 2b	- - // XXIVI	K41.	810	1 4.18
	<i>obv. IMP C M AVR PROBVS P AVG</i>					
771	VIRTVS PROBI AVG	Mars 2b	- - // XXIQ	K41.	816v	1 3.79
772	VIRTVS PROBI AVG	Mars 2b	- - // XXIVI	K41.	816	1 3.99
	<i>obv. IMP C M AVR PROBVS AVG</i>					
773	CONCORD MILIT	Emperor and Concordia 1	- - // XXIS	B1	651	1 3.76
774	CONCORD MILIT	Emperor and Concordia 1	- - // XXIV	B1	651	1 3.79
	<i>obv. IMP C PROBVS PF AVG</i>					
775	RESTITVT ORBIS	Emperor and female 1	* // XXIQ	B1	733	1 4.17
776	RESTITVT ORBIS	Emperor and female 1	* // XXIV	B1	733	1 3.67
	<i>obv. IMP PROBVS PF AVG</i>					
*777	CONCORD MILIT	Emperor and Concordia 1	- - // XXIQ	K41.	-	1 4.24
*778	LAETITIA AVG	Laetitia 1	- - // XXIV	B11.	-	1 4.07
779	PAX AVGVSTI	Pax 1	- - // XXIVI	H41.	713	1 3.89
	<i>Issue 6</i>					
	<i>obv. IMP C M AVR PROBVS AVG</i>					
780	SOLI INVICTO	Sol in quadriga 2a	- - // XXIQ	D2	768	1 3.38
	<i>obv. IMP PROBVS PF AVG</i>					
781	CONCORDIA MILIT	Emperor and Concordia 1	- - // XXIQ	B1	666	1 4.65
782	CONCORDIA MILIT	Emperor and Concordia 1	- - // XXIQ	D2	666	1 4.30

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qn</i>	<i>Weight</i>
783	CONCORDIA MILIT	Emperor and Concordia I	- - // XXIQ	H5I.	666	1	4.06
	<i>Issue 7</i>						
	<i>obv.</i> IMP C M AVR PROBVS PF AVG						
784	CONCORD MILIT	Emperor and Concordia I	P // XXI	K4I.	650	1	3.71
785	VIRTVS PROBI AVG	Emperor 15	T // XXI	K4I.	818	1	3.37
786	VIRTVS PROBI AVG	Mars 2b	- V // XXI	B1I.	810	1	3.64
	<i>obv.</i> IMP C M AVR PROBVS P AVG						
†787	PROVIDENT AVG	Providentia I	- S // XXI	F2I.	723	1	4.03
†788	VIRTVS PROBI AVG	Mars 2b	- S // XXI	K4I.	816v	1	3.36
	<i>obv.</i> IMP C PROBVS PF AVG						
789	PAX AVG	Pax I	- P // XXI	B1	706	1	4.01
790	PAX AVG	Pax I	- T // XXI	B1	706	1	3.65
791	PAX AVGVSTI	Pax I	- Q // XXI	B1	712	2	3.84, 3.74
	<i>obv.</i> IMP PROBVS PF AVG						
792	CONCORDIA AVG	Concordia 2	- P // XXI	B1	661	1	4.26
793	CONCORDIA MILIT	Emperor and Concordia I	T // XXI	D2	666	1	4.14
794	PAX AVGVSTI	Pax I	- S // XXI	B1	713	1	2.78
795	PAX AVGVSTI	Pax I	- T // XXI	B1	713	1	3.85
796	PAX AVGVSTI	Pax I	- V // XXI	K4I.	713	1	4.17
797	PAX AVGVSTI	Pax I	- VI // XXI	H4I.	713	1	4.20
798	SALVS AVG	Salus 2	- O // XXI	B1	748	1	4.75
	<i>obv.</i> IMP PROBVS AVG						
*†799	VIRTVS PROBI AVG	Mars 2b	- Q // XXI	B1I.	-	1	3.82
	Serdica (2)						
	<i>Issue 2</i>						
	<i>obv.</i> IMP C M AVR PROBVS AVG						
*†800	RESTITVT ORBIS	Emperor and female I	* // KAΔ	D2	-	1	3.00
	<i>Issue 4</i>						
	<i>obv.</i> IMP C M AVR PROBVS PF AVG						
*801	VIRTVS PROBI AVG	Emperor 9a	- - // KA-Δ	D2	877	1	4.07
	Cyzicus (3)						
	<i>Issue 1</i>						
	<i>obv.</i> IMP C M AVR PROBVS AVG						
802	CLEMENTIA TEMP	Emperor and Jupiter 1b	P // XXI	D2	905	1	3.36
	<i>Issue 3</i>						
	<i>obv.</i> IMP C M AVR PROBVS PF AVG						
803	SOLI INVICTO	Sol in quadriga 1c	CM // XXIT	K4I.	911	1	3.73
	<i>Issue 4</i>						
	<i>obv.</i> IMP C M AVR PROBVS PF AVG						
*804	SOLI INVICTO	Sol in quadriga 1c	CM // XXIΔ	K4I.	911	1	3.57
	Antioch (1)						
	<i>Issue 2</i>						
	<i>obv.</i> IMP C M AVR PROBVS PF AVG						
*805	RESTITVT ORBIS	Emperor and female I	ε // XXI	D2	925	1	3.97
	CARUS AND FAMILY						
	Lyon (51)				<i>Bastien</i>	<i>RIC</i>	
	<i>Issue 1</i>						
	<i>obv.</i> IMP C M AVR CARVS-PF-AVG						
806	VICTORIA AVG	Victory 3a	- - // -	D1	449	20	1 3.39
	<i>Issue 2</i>						
	<i>obv.</i> IMP C M AVR CARVS-PF-AVG						
*†807	VICTORIA AVG	Victory 3a	A - // -	D1	-	20	1 3.74
	<i>Issue 3</i>						
	<i>obv.</i> IMP C M AVR CARVS P F AVG						
*†808	PAX AVGG	Pax I	B - // -	H1	478	12	1 3.91

Cat. No			Marks	Bust		RIC	Qty	Weight
Issue 4								
obv. IMP C M AVR CARVS P F AVG								
809	PAX AVGG	Pax 1	B - // -	B1	508	12	1	3.50
obv. IMP C M AVR CARVS AVG								
810	AEQVITAS AVG	Aequitas 1	- A // -	B1	506	8	1	4.31
811	VICTORIA AVGG	Victory 13	A - // -	B1	502	24	2	4.10, 4.08
812	PAX AVGG	Pax 1	B - // -	B1	509	13	1	3.31
obv. M AVR NVMERIANVS NOB C								
813	PRINCIPI IVVENTVT	Prince 1	C - // -	D2	513	356	1	3.23
obv. CARINVS NOBIL CAES								
814	SAEVL FELICITAS	Emperor 2	- D // -	D1	522	152	1	3.51
†815	SAEVL FELICITAS	Emperor 2	- D // -	D1	523	152	1	4.14
Issue 6								
obv. IMP C M AVR CARINVS AVG								
816	AEQVITAS AVG	Aequitas 1	- A // -	D1	533	212	6	4.13, 4.12, 3.82, 3.68, 3.64, 3.48
*817	SAEVL FELICITAS	Emperor 2	- D // -	D1	548	214	2	4.02, 3.46
obv. IMP C M AVR NVMERIANVS AVG								
818	MARS VICTOR	Mars 2b	- C // -	D2	543	386	1	3.64
obv. IMP C NVMERIANVS AVG								
819	PAX AVGG	Pax 1	B - // -	B1	539	394	3	4.70, 3.94, 3.20
820	MARS VICTOR	Mars 2b	- C // -	B1	544	388	3	4.19, 4.04, 3.58
obv. IMP NVMERIANVS AVG								
*821	PAX AVGG	Pax 1	B - // -	G11.	557	395	1	3.22
Issue 7								
obv. IMP C NVMERIANVS AVG								
822	FELICITAS AVGG	Felicitas 4	B - // LVG	B1	579	384	2	4.33, 3.35
Issue 8								
obv. IMP C NVMERIANVS AVG								
823	FELICITAS AVGG	Felicitas 4	B - // -	B1	595	384	1	4.40
824	PIETAS AVGG	Pietas 7	- C // -	B1	596	396	2	4.05, 3.67
obv. IMP NVMERIANVS AVG								
825	PIETAS AVGG	Pietas 7	- C // -	B1	598	397	6	4.76, 4.38, 4.22, 4.12, 3.74, 3.59
Issue 9								
obv. IMP CARINVS P F AVG								
826	VICTORIA AVGG	Victory 3	A - // -	D1	612	220	1	3.94
obv. IMP C NVMERIANVS AVG								
827	PACATOR ORBIS	Emperor 16	- - // C	B1	618	-	1	3.43
obv. MAGNIA VRBICA AVG								
*828	VENVS GENETRIX	Venus 5	D - // -	E2	617	337	3	4.07, 3.97, 3.37
Issue 10								
obv. DIVO CARO PIO								
829	CONSECRATIO	Eagle 2	- - // I	A1	622	29	2	3.87, 3.68
*830	CONSECRATIO	Eagle 2	- - // II	A1	623	29	3	4.03, 3.65, 3.50
831	CONSECRATIO	Eagle 2	- - // III	A1	624	29	2	4.02, 3.38
832	CONSECRATIO	Eagle 2	- - // IIII	A1	625	29	1	3.65
Rome (29)					Gricourt RIC			
			// R(A-Z)					
obv. M AVR CARINVS NOB CAES								
833	PIETAS AVGG	Sacrificial impl. 2	Z	D1	1638	155	1	4.01
			// (A-Z)AK					
obv. M AVR CARINVS NOB CAES								
*834	PIETAS AVGG	Sacrificial impl. 2a	Z	D1	1652	155	1	3.39
			// (A-Z)KA					
obv. IMP C M AVR CARVS P F AVG								
835	IOVI VICTORI	Jupiter 9	B	B1	1721	38	1	3.97
836	PROVIDENT AVGG	Providentia 2a	Δ	B1	1805	42	2	4.27, 3.90
obv. M AVR CARINVS NOB CAES								
837	PRINCIPI IVVENTVT	Prince 1	ς	D1	1857	161	1	4.01
obv. M AVR NVMERIANVS NOB C								
838	PRINCIPI IVVENTVT	Prince 1	ς	D2	1939	363	1	3.75

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
			// KA(A-Z)				
	<i>obv.</i> IMP CARVS P F AVG						
*839	IOVI VICTORI	Jupiter 9	B	B1	2199	39	1 4.32
840	VIRTVS AVG	Virtus 1	Γ	B1	2246	46	1 3.56
	<i>obv.</i> M AVR CARINVS NOB CAES						
841	PRINCIPI IVVENTVT	Prince 3a	ε	D1	2330	158	2 3.48, 3.44
	<i>obv.</i> M AVR CARINVS CAES						
842	PRINCIPI IVVENTVT	Prince 3a	ε	D1	2338	160	1 3.85
843	PIETAS AVGG implements 2a	Sacrificial	Z	D1	2410	157	1 4.07
	<i>obv.</i> M AVR NVMERIANVS NOB C						
844	PRINCIPI IVVENTVT	Prince 2d	Δ	D2	2287	361	1 4.20
			// KA(A-Z)				
	<i>obv.</i> IMP C M AVR CARINVS P F AVG						
*845	AETERNIT AVGG	Aeternitas 1	Γ	D1	2683	246	1 3.80
	<i>obv.</i> IMP C M AVR CARINVS AVG						
846	FIDES MILITVM	Fides 1	ε	D1	3012	252	1 3.79
	<i>obv.</i> IMP CARINVS P F AVG						
847	FIDES MILITVM	Fides 1	ε	B1	3123	253	2 4.18, 3.76
848	AEQVITAS AVGG	Aequitas 1	Z	B1	3359	239	1 2.86
	<i>obv.</i> IMP NVMERIANVS AVG						
849	IOVI VICTORI	Jupiter 9	B	B1	2588	410	2 4.62, 3.47
850	IOVI VICTORI	Jupiter 9	B	D2	3409	410	1 3.51
851	PIETAS AVGG	Mercury 1a	Δ	B1	2854	416	1 3.51
*852	VNDIQVE VICTORES	Emperor 10a	ς	B1	3194	423	1 2.88
853	ORIENS AVGG	Sol 7	ς	D2	3623	412	1 3.17
	<i>obv.</i> DIVO NIGRINIANO						
*854	CONSECRATIO	Eagle 1	A	A1	3774	472	1 3.36
			// KA crescent (A-Z)				
	<i>obv.</i> IMP CARINVS P F AVG						
855	AETERNIT AVG	Aeternitas 1	Γ	B1	4026	244	1 3.97
856	PIETAS AVG	Mercury 1a	Δ	B1	4067	264	1 4.03
			// KA dot-in- crescent (A-Z)				
	<i>obv.</i> IMP CARINVS P F AVG						
*857	PIETAS AVG	Mercury 1a	Δ	B1	4049	264	1 4.04
	Ticinum (36)						
	<i>obv.</i> M AVR NVMERIANVS NOB C						
858	PRINCIPI IVVENTVT	Prince 2d	-- // VIXXI	D2	442	366	1 3.12
	<i>obv.</i> IMP CARVS P F AVG						
859	PAX EXERCITI	Pax 6	-- // PXXI	B1	483	75	5 4.18, 4.11, 3.66, 3.15, 3.11
860	SPES PVBLICA	Spes 1	-- // SXXI	B1	668	82	5 3.90, 3.67, 3.55, 3.50, 3.40
	<i>obv.</i> IMP CARINVS P F AVG						
861	FELICIT PVBLICA	Felicitas 4	-- // TXXI	D1	868	295	5 4.34, 3.80, 3.71, 3.64, 3.42
862	FELICITAS PVBLICA	Felicitas 4	-- // QXXI	D1	1023	295	1 3.99
863	FELICIT PVBLICA	Felicitas 4	-- // QXXI	D1	1024	295	3 4.08, 4.03, 3.44
	<i>obv.</i> IMP NVMERIANVS P F AVG						
864	PROVIDENT AVGG	Providentia 4	-- // VXXI	D2	1193	447	2 5.32, 3.78
865	PROVIDENT AVGG	Providentia 4	-- // VIXXI	D2	1314	447	1 4.33
	<i>obv.</i> IMP CARVS P F AVG						
866	PROVID(EN)T AVGG	Providentia 4	-- // [?]XXI	D2	1459	447	1 3.85
	<i>obv.</i> IMP CARVS P F AVG						
867	FIDES MILIT	Fides 1	T -- // PXXI	B1	1463	70v	1 4.26
	<i>obv.</i> IMP CARINVS P F AVG						
868	VICTORIA AVG	Victory 3	T -- // QXXI	D1	1477	304	1 3.76
	<i>obv.</i> IMP CARVS P F AVG						
*869	FIDES MILIT	Fides 1	-- // PXXIT	B1	1495	70	1 3.86

Car. No			Marks	Bust		RIC	Qty	Weight
obv. MAGNIA VRBICA AVG								
*870	VENVS VICTRIX	Venus 1b	- - // SXXIT	E2	1504	347	3	4.22, 3.90, 3.76
obv. IMP M AVR CARINVS P F AVG								
*871	FORTVNA REDVX	Fortuna 1a	- - // TXXIT	D1	1530	299	1	4.01
872	FORTVNA RED	Fortuna 1a	- - // TXXIT	D1	—	299	2	4.06, 3.90
876	VICTORIA AVG	Victory 3	- - // QXXI	D1	1553	305	1	4.02
obv. IMP NVMERIANVS P F AVG								
874	ROMAE AETERN	Roma 2	- - // VIXXIT	D2	1582	449	2	4.39, 3.86
Siscia (1)								
obv. M AVR CARINVS NOB CAES								
875	PRINCIPI IVVENTVT	Prince 2c	* - // XXIT	D2	—	198	1	4.09
DIOCLETIAN & MAXIMIAN								
Lyon (230)								
Issue 1a								
obv. IMP C C VAL DIOCLETIANVS P F AVG								
876	VICTORIA AVG	Victory 1	A - // -	D2	8	91	3	3.70, 3.54, 2.91
877	FELICITAS AVG	Felicitas 4	B - // -	D2	11	19	1	4.28
878	SALVS AVG	Salus 2	- B // -	D2	10	85	2	3.71, 3.59
879	PROVIDENTIA AVG	Providentia 4	- C // -	D2	13	77	3	3.84, 3.78, 3.77
880	PROVIDENTIA AVG	Providentia 4	see note	D2	15	77v	1	4.13
*†881	PROVIDENTI AVG	Providentia 4	- C // -	D2	—	—	1	4.07
882	FELICITAS AVG	Felicitas 4	D - // -	D2	16	19	2	3.64, 3.55
Issue 1b								
obv. IMP C C VAL DIOCLETIANVS P F AVG								
883	IOVI CONSERVAT AVG	Jupiter 1	A - // -	D2	18	41	15	5.08, 4.85, 4.27, 4.20, 4.11, 3.99, 3.95, 3.82, 3.70, 3.62, 3.59, 3.58, 3.50, 3.05, 2.91
884	IOVI CONSERVAT AVG	Jupiter 1	B - // -	D2	21	41	5	4.49, 3.93, 3.91, 3.87, 2.85
885	IOVI CONSERVATORI	Jupiter 1	C - // -	D2	24	47	6	4.05, 3.85, 3.84, 3.75, 3.60, 3.54
†886	IOVI CONSERVATORI	Jupiter 1	see note	D2	26	47	1	4.07
887	IOVI CONSERVATORI	Jupiter 1	D - // -	D2	27	47	4	4.90, 4.48, 4.09, 3.56
Issue 2								
obv. IMP C C VAL DIOCLETIANVS P F AVG								
888	IOVI CONSERVAT AVGG	Jupiter 1	A - // -	D2	50	43	14	4.42, 4.38, 4.34, 4.26, 4.15, 4.04, 4.00, 3.66, 3.62, 3.53, 3.47, 3.37, 3.36, 3.31
889	IOVI CONSERVAT AVGG	Jupiter 1	B - // -	D2	54	43	17	4.81, 4.44, 4.39, 4.34, 4.21, 4.06, 4.01, 3.95, 3.91, 3.75, 3.72, 3.71, 3.69, 3.68, 3.53, 3.49, 3.47
890	VIRTVS AVGG	Jupiter and Hercules 1	C // -	D2	61	93v	1	4.21
obv. IMP C VAL MAXIMIANVS P F AVG								
891	IOVI CONSERVATORI	Jupiter 1	C - // -	D1	60	388v	2	4.46, 4.11
†892	IOVI CONSERVATORI	Jupiter 1	see note	D1	64	388	4	4.06, 3.91, 3.88, 3.51
893	SALVS AVGG	Salus 2	C - // -	D1	56	417	7	4.14, 4.12, 4.09, 3.73, 3.63, 3.36(2)
894	VIRTVS AVGG	Hercules 1	C - // -	D1	59	437	2	3.58, 3.20
895	VIRTVS AVGG	Jupiter and Hercules 1	C // -	D1	62	432	2	4.67, 3.64
896	IOVI CONSERVATORI	Jupiter 1	D - // -	D1	70	388	2	4.59, 3.69
897	VIRTVS AVGG	Hercules 1	D - // -	D1	67	437	4	5.00, 3.92, 3.64, 3.61

Car. No		Marks	Bust	RIC	Qty	Weight
<i>obv. IMP MAXIMIAVS P F AVG sic</i>						
*†933	SALVS AVGG	Salus 2	-- // C	KSl.	–	1 4.44
<i>obv. IMP MAXIMIANVS P AVG</i>						
934	SALVS AVGG	Salus 2	-- // C	B1	406	421 1 3.70
935	SALVS AVGG	Salus 2	-- // C	K4l.	408	421 1 4.58
<i>obv. IMP MAXIMIANVS AVG</i>						
936	IOVI AVGG	Jupiter 1c	-- // A	D1	330	384 2 4.09, 3.71
937	IOVI AVGG	Jupiter 1c	-- // A	K4l.	338	384 2 4.02, 3.66
938	FELICIT PVBL	Felicitas 4	-- // B	B1	357	360 2 3.84, 3.74
939	SALVS AVGG	Salus 2	-- // C	B1	410	422 5 3.91, 3.80, 3.73, 3.65, 3.61
940	SALVS AVGG	Salus 2	-- // C	D1	409	422 2 4.22, 3.68
941	SALVS AVGG	Salus 2	-- // C	K11.	414	422 2 3.82, 3.32
942	SALVS AVGG	Salus 2	-- // C	K4l.	416	422 4 4.31, 4.06, 4.01, 3.73
943	SALVS AVGG	Salus 2	-- // C	KSl.	415	422 1 3.84
<i>Issues 7-8</i>						
<i>obv. IMP DIOCLETIANVS AVG</i>						
944	PAX AVGG	Pax 7	-- // B	B1	365	67 1 4.15
945	PAX AVGG	Pax 7	-- // B	D1	364	67 1 4.39
†946	PAX AVGG	Pax 7	-- // B	K4l	369	67 1 3.82
<i>obv. IMP MAXIMIANVS P AVG</i>						
947	PAX AVGG	Pax 7	-- // B	B1	374	398 1 3.67
948	PAX AVGG	Pax 7	-- // B	K4l	378	398 2 4.00, 3.40
<i>obv. IMP MAXIMIANVS AVG</i>						
949	PAX AVGG	Pax 7	-- // B	B1	380	399 10 4.78, 4.58, 4.25, 4.12, 4.02, 3.94, 3.91, 3.56, 3.36, 3.30
950	PAX AVGG	Pax 7	-- // B	D1	379	399 3 4.12, 3.78, 3.54
951	PAX AVGG	Pax 7	-- // B	H1	381	399 2 3.55(2)
952	PAX AVGG	Pax 7	-- // B	K4l.	387	399 9 4.34, 4.03, 4.03, 4.01, 3.98, 3.75, 3.57, 3.44, 3.41
<i>Issue 8</i>						
<i>obv. IMP DIOCLETIANVS AVG</i>						
*953	IOVI AVGG	Jupiter 6	-- // A	B1	436	34 1 4.60
<i>Issue 10</i>						
<i>obv. IMP MAXIMIANVS AVG</i>						
*†954	VOTIS X	Emperors (two) 2	-- // -	K4l	531	467 1 3.56
*†955	VOTIS X	Emperors (two) 2	-- // -	K4l	531v	467 1 3.64
<i>Rome (5)</i>						
<i>obv. IMP DIOCLETIANVS AVG</i>						
956	VICTORIA AVG	Victory 1	-- // XXIA	D2	6979	cf183 1 3.62
*957	MARTI PACIF	Mars 4	-- // XXIE	D2	7127	173 1 3.96
958	IOVI CONSERVAT AVG	Jupiter 1	-- // XXII*	D2	7629	161 1 3.33
959	IOVI CONSERVAT AVG	Jupiter 1	-- // XXIE	D2	7326	161 1 2.78
<i>obv. IMP MAXIMIANVS PF AVG</i>						
960	IOVI CONSERVAT AVGG	Jupiter 1	-- // XXIZ	D1	7551	506 1 3.35
<i>Ticinum (41)</i>						
<i>obv. IMP C C VAL DIOCLETIANVS PF AVG</i>						
<i>First phase</i>						
961	VICTORIA AVG	Victory 3	-- // PXXIT	D1	4499	242 1 3.61
962	CONSERVAT AVG	Sol 7	-- // SXXIT	D1	4574	206 2 4.51, 2.73
963	FORTVNA RED	Fortuna 1a	-- // TXXIT	D1	4636	209 1 4.73
964	VIRTVS AVG	Virtus 1	-- // QXXIT	D1	4684	244 2 4.12, 3.81
965	PROVIDENT AVG	Providentia 1	-- // VXXIT	D1	4775	240 1 3.90
†966	MARS VICTOR	Mars 2b	-- // VIXXIT	D1	4864	239c 2 4.19, 3.47
<i>Second and later phases</i>						
967	IOVI CONSERVAT	Jupiter 1a	-- // SXXIT	B1	5276	220 1 3.56
968	IOVI CONSERVAT	Jupiter 1a	-- // SXXIT	D1	5212	220 1 3.53
969	IOVI CONSERVAT	Jupiter 1a	-- // QXXIT	D1	5681	220 1 4.20

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
970	IOVI CONSERVAT	Jupiter Ia	-- // VXXIT	B I	5836	220	1	3.61
971	IOVI CONSERVAT	Jupiter I	-- // PXXIT	B I	5008	222	3	4.27, 4.15, 3.50
972	IOVI CONSERVAT	Jupiter I	-- // TXXIT	B I	5427	222	3	4.55, 4.02, 2.75
973	IOVI CONSERVAT	Jupiter I	-- // TXXIT	D I	5357	222	5	4.75, 4.59, 4.16, 3.83, 3.80
974	IOVI CONSERVAT	Jupiter I	-- // VIXXIT	D I	5845	222	2	4.95, 4.63
*975	HERCVLI CONSERVAT	Hercules I	-- // SXXIT	D I	5944	212	1	3.90
*976	HERCVLI CONSERVAT	Hercules I	-- // PXXIT	B I	6273	212	1	3.79
	<i>obv.</i> IMP C C VAL DIOCLETIANVS AVG							
977	IOVI CONSERVAT	Jupiter I	-- // PXXIT	B I	5159	223	2	4.40, 3.97
	<i>obv.</i> IMP C VAL DIOCLETIANVS AVG							
978	IOVI CONSERVAT	Jupiter I	-- // PXXIT	B I	6076	225	3	4.36, 3.74, 3.52
979	IOVI CONSERVAT	Jupiter I	-- // SXXIT	B I	6377	225	2	3.71, 3.65
	<i>obv.</i> IMP C M A VAL MAXIMIANVS PF AVG							
980	IOVI CONSERVAT	Jupiter I	-- // PXXIT	D I	6203	558	2	3.65, 3.52
*981	IOVI CONSERVAT	Jupiter I	-- // TXXIT	D I	6777	558	3	4.22, 3.68, 3.47
	<i>obv.</i> IMP C M A VAL MAXIMIANVS AVG							
*982	IOVI CONSERVAT	Jupiter IO	-- // SXXIT	B I	—	560	1	3.66

D: 'BRITISH' EMPIRE, c.287-96

CARAUSIUS

Unmarked and uncertain coins (3)

					<i>Carson</i>	<i>RIC</i>		
	<i>obv.</i> VIRTVS CARAVSI							
*983	VICTORIA AVG	Victory 3	-- // *	H I L	—		1	3.56
	<i>obv.</i> IMP CARAVSIVS P AVG							
984	PAVX AVG (?)	Pax Ib	S ? // III	D I	1096?		1	5.68
*†985	SALVS AVG	Pax Ib	-- // *	D I	as 996		1	4.25

London (3)

	<i>obv.</i> IMP CARAVSIVS PF AVG							
*986	LEG XXX VLP IA	Neptune 2	-- // ML	D I	84v		1	4.90
*†987	PAX AVG	Pax Ib(?)	F O // ML	D I	101		1	3.86
	<i>obv.</i> IMP C CARAVSIVS PF AVG							
*988	PAX AVGGG	Pax Ib	S P // MLXXI	D I	8	141	1	3.58

C mint (10)

	<i>obv.</i> IMP CARAVSIVS PF AVG							
989	MONETA AVG	Moneta I	-- // C	D I	287		1	4.24
*990	SALVS AVG	Salus 5	-- // CXXI	D I	401		1	5.14
	<i>obv.</i> IMP C CARAVSIVS P AVG							
*†991	PROVIDENTIA AVG	Providentia Ia	S C // C	D I	374v		1	4.54
*†992	SPES PVBLICA	Spes I	S P // C	D I	—		1	4.59
	<i>obv.</i> IMP C CARAVSIVS AVG							
993	PAX AVG	Pax Ib	S P // C	D I	302		1	4.39
*†994	SPES PVBLIC	Spes I	S P // C	D I	—		1	4.26
	<i>obv.</i> IMP C CARAVSIVS PF AVG							
995	PAX AVGGG	Pax Ib	S P // C	D I	11	334	1	4.48
*996	PAX AVGGG	Pax I	S P // C	D I	27	—	2	4.52, 4.21

	<i>obv.</i> IMP C CARAVSIVS AVG							
*997	PAX AVGGG	Pax Ib	S P // MC	D I	—	cf. 336	1	3.70

DIOCLETIAN, MAXIMIAN

London (5)

	<i>obv.</i> IMP C DIOCLETIANVS PF AVG							
*998	IOVI CONSERVAT AVGGG	Jupiter II	S P // MLXXI	B I	—	—	1	4.21
999	PAX AVGGG		S P // MLXXI	D I	—	9	1	4.52
	<i>obv.</i> IMP C MAXIMIANVS PF AVG							
*†1000	PAX AVGGG	Pax I	S P // MLXXI	B I	18	34	1	4.34

<i>Cat. No</i>			<i>Marks</i>	<i>Bust</i>		<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
*1001	SALVS AVGGG	Salus 2	S P // MLXXI	BI	—	38	1	4.13
*†1002	obverse brockage			BI	—	—	1	4.80
	C mint (3)							
	obv. IMP C DIOCLETIANVS AVG							
*†1003	MONETA AVGGG	Moneta 1	S P // C	BI	7	—	1	4.26
	obv. IMP C MAXIMIANVS P AVG							
1004	PROVID AVGGG	Providentia 1	S P // C	BI	—	—	1	4.34
	obv. CARAVSIVS ET FRATRES SVI							
*†1005	VICTORIA AGGG sic	Victory 8	S P // C	NII.	—?	—	1	4.59
	ALLECTUS							
	Aureliani (3)					Burnett	RIC	
	London (1)							
	obv. IMP C ALLECTVS P F AVG							
*1006	ORIENS AVG	Sol 3	S P // ML	BI	9	26	1	3.33
	C mint (2)							
	obv. IMP C ALLECTVS P F I AVG							
*†1007	LAETITIA AVG	Laetitia 1	S P // C	DI	136	—	1	3.97
	obv. IMP C ALLECTVS P F AVG							
*†1008	FIDES MILIT	Fides 1	S P // C	DI	—	—	1	4.26
	Q-radiates (757)							
	London (295)					Burnett	RIC	
	obv. IMP C ALLECTVS P F AVG							
	rev. VIRTVS AVG							
1009	1. Galley to left, no mast	-- // QL	BI	108	55		2	2.82, 2.71
*†1010	2. Galley to right, no mast	-- // QL	BI	110	55		2	2.65, 2.63
*†1011		-- // QL	BI	110	55		2	2.68, 2.27
*†1012		-- // QL	BI	110	55		1	2.97
*†1013		-- // QL	BI	110	55		1	2.70
*1014	3. Galley to left, with mast and ram	-- // QL	DI	112	55		25	3.43, 3.40, 3.38, 3.35, 3.25, 3.23, 3.18, 3.17, 3.15, 3.12, 3.10, 3.09, 3.07, 3.05, 2.97, 2.96, 2.89, 2.88, 2.85, 2.81(2), 2.75, 2.70(2), 2.56
*1015		-- // QL	D2	113	55		15	3.86, 3.58, 3.46, 3.32, 3.22, 3.02, 3.02, 2.89, 2.73, 2.70, 2.63, 2.60, 2.57, 2.49, 2.39
*†1016		-- // QL	D2	113	55		1	3.13
*1017		-- // QL	BI	111	55		213	4.48, 4.07, 4.05, 3.98, 3.85, 3.77(2), 3.67, 3.65, 3.63, 3.62, 3.58, 3.55, 3.54, 3.48, 3.46 (2), 3.44, 3.43, 3.41, 3.40(2), 3.39(2), 3.38, 3.36(2), 3.32, 3.31(5), 3.26(2), 3.25(5), 3.23(5), 3.22(2), 3.21, 3.20, 3.19, 3.17, 3.16(2), 3.15, 3.14, 3.13, 3.12(4), 3.11, 3.10, 3.08(3), 3.07,

<i>Cat. No</i>	<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
					3.06(2), 3.04 (2), 3.03(5), 3.02(2), 3.01, 3.00, 2.99(5), 2.98, 2.97, 2.96, 2.96(2), 2.95(3), 2.94(2), 2.93, 2.93, 2.92(4), 2.91(5), 2.89(3), 2.88(2), 2.87(4), 2.86(2), 2.85(2), 2.84(2), 2.83(6), 2.82(4), 2.81(2), 2.80(4), 2.79(6), 2.78, 2.78, 2.76(3), 2.75(4), 2.74(4), 2.73, 2.72(2), 2.69(5), 2.68, 2.67(5), 2.66, 2.65, 2.64(4), 2.63, 2.62(4), 2.60, 2.56, 2.54(2), 2.53, 2.51, 2.50(2), 2.49(3), 2.47, 2.46(3), 2.44, 2.43(2), 2.42, 2.40, 2.39, 2.36(2), 2.34, 2.33, 2.32, 2.30(2), 2.29, 2.25, 2.19, 2.09, 2.08
*†1018	-- // QV	B1	—	1	3.19
*1019	4. Galley to right, with mast and ram	D1	—	55	1 2.59
*1020	-- // QL	B1	—	55	26 3.89, 3.87, 3.70, 3.66, 3.45, 3.16(2), 3.12, 3.11(2), 3.08, 3.05, 2.94(2), 2.88, 2.85, 2.78, 2.76, 2.69, 2.66, 2.62, 2.57, 2.52, 2.50(3)
*†1021	5. Boat to left	-- // QL	B1	(108)	55 1 3.55
*†1022	-- // QL	B1	(111)	55	1 3.54
*†1023	-- // QL	B1	(111)	55	1 2.91
*†1024	-- // QL	B1	(111)	55	1 2.76
*1025	6. Light craft to right, with mast	-- // QL	B1	—	55 1 2.89
C mint (462)					
<i>rev.</i> LAETITIA AVG					
1a. Galley to left, no cabin; waves					
*1026	<i>obv.</i> IMP C ALLECTVS P F I AVG	B1	—	—	1 3.14
*1027	<i>obv.</i> IMP C ALLECTVS P F AVG	B1	214	124	5 3.16, 3.10, 3.07, 3.04, 2.78
*1028	<i>obv.</i> IMP C ALLECTVS P AVG	B1	—	125	2 3.10, 3.04
1b. Galley to right, no cabin; waves					
*1029	<i>obv.</i> IMP C ALLECTVS P I FE AVG	B1	—	127	2 3.33, 3.31
*1030	<i>obv.</i> IMP C ALLECTVS P F I AVG	B1	212	—	5 3.07, 3.01, 2.99, 2.97, 2.73
*1031	<i>obv.</i> IMP C ALLECTVS P F AVG	B1	210	124	25 4.15, 3.67, 3.48, 3.44, 3.31, 3.27, 3.19, 3.18, 3.16, 3.14(2), 3.12, 3.08, 3.07, 3.06, 3.02, 3.01, 3.00, 2.99, 2.98, 2.93, 2.89(2), 2.85, 2.76
*1032	<i>obv.</i> IMP C ALLECTVS P AVG	B1	211	125	17 3.46, 3.34, 3.23, 3.21, 3.16, 3.12, 3.07, 3.04, 3.03(2), 3.01, 2.96, 2.79, 2.76, 2.73(2), 2.42

<i>Cat. No</i>		<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
1033	<i>obv.</i> IMP ALLECTVS P AVG 2. Galley to right, no cabin; no waves		B1 -	-	1	2.26
*1034	<i>obv.</i> IMP C ALLECTVS P F AVG		B1 210	124	18	3.53, 3.34, 3.33, 3.24, 3.14(2), 3.13(2), 3.10, 2.98, 2.96, 2.93, 2.86, 2.83, 2.81, 2.76, 2.65, 2.58
*1035	<i>obv.</i> IMP C ALLECTVS P AVG		B1 211	125	35	3.69, 3.43, 3.42, 3.40, 3.35(2), 3.32, 3.30, 3.22, 3.20, 3.14, 3.09(2), 3.08, 3.07, 3.04, 3.02, 3.01, 3.00(2), 2.97, 2.93, 2.92, 2.91, 2.89, 2.86, 2.85(2), 2.84, 2.81, 2.80, 2.79, 2.74, 2.72, 2.62
*1036	<i>obv.</i> IMP C ALLECTVS AVG		B1 -	126	18	3.71, 3.45, 3.32, 3.28, 3.18, 3.14, 3.06, 3.05, 2.94(2), 2.91, 2.88(2), 2.74, 2.73, 2.64, 2.61, 2.51
*1037	<i>obv.</i> IMP ALLECTVS P AVG 3. Galley to right, with cabin; no waves		B1 -	-	1	2.60
*1038	<i>obv.</i> IMP C ALLECTVS AVG <i>rev.</i> VIRTVS AVG	- // QC	B1 -	-	1	3.20
	Galley to left, with cabin; no waves					
*†1039	<i>obv.</i> IMP C ALLECTVS P FEL AVG		B1 -	-	2	3.21, 2.97
*†1040	<i>obv.</i> IMP C ALLECTVS P F I AVG		B1 -	-	2	3.24, 3.02
*1041	<i>obv.</i> IMP C ALLECTVS P F AVG		B1 215	128	206	3.92, 3.63, 3.59, 3.52, 3.51, 3.50(2), 3.45, 3.43, 3.42, 3.40, 3.39, 3.37, 3.36, 3.34, 3.34(2), 3.30, 3.29, 3.28, 3.27(3), 3.26, 3.26(2), 3.25(2), 3.24, 3.24, 3.23(2), 3.22(4), 3.20, 3.19, 3.19(2), 3.18, 3.17, 3.16(3), 3.15, 3.15(2), 3.14, 3.14(5), 3.13, 3.13(2), 3.12(3), 3.11, 3.10, 3.10(3), 3.09(2), 3.08, 3.08(5), 3.07, 3.07(2), 3.06(2), 3.05(4), 3.04, 3.04(6), 3.03(2), 3.03(3), 3.01(2), 3.00(2), 2.99(2), 2.99(5), 2.98(3), 2.97(2), 2.96(2), 2.95(5), 2.94(2), 2.93, 2.92(2), 2.91, 2.91(5), 2.90, 2.90(2), 2.89, 2.88 (2), 2.87(5), 2.86(4), 2.85(2), 2.85, 2.84, 2.83, 2.81(2),

<i>Cat. No.</i>	<i>Marks</i>	<i>Bust</i>	<i>RIC</i>	<i>Qty</i>	<i>Weight</i>
					2.80(8), 2.79, 2.78, 2.78, 2.77(3), 2.76(2), 2.75, 2.75(2), 2.74, 2.74(3), 2.73, 2.73(2), 2.72, 2.72, 2.71, 2.70, 2.70, 2.69, 2.69(2), 2.68, 2.67, 2.66, 2.65(2), 2.61(2), 2.60, 2.60(2), 2.59, 2.58, 2.57, 2.55, 2.55(2), 2.52, 2.51, 2.46(2), 2.36, 2.35
*†1042		B 219	—	1	2.79
*1043	<i>obv.</i> IMP C ALLECTVS P AVG	B 216	—	86	3.60, 3.59, 3.56, 3.55, 3.49, 3.48, 3.45, 3.43, 3.38, 3.37, 3.36, 3.36, 3.33, 3.32, 3.31, 3.30, 3.30(3), 3.28(2), 3.26, 3.25, 3.24(2), 3.22, 3.21, 3.20, 3.19(2), 3.15, 3.14, 3.13, 3.12, 3.11(2), 3.09, 3.09(2), 3.07, 3.02, 3.00, 2.98(2), 2.97, 2.96(2), 2.95(3), 2.94 (2), 2.91(2), 2.89(2), 2.86(2), 2.83, 2.82, 2.80(2), 2.79, 2.78, 2.77(3), 2.76, 2.76, 2.74, 2.72, 2.72(2), 2.71(2), 2.70(2), 2.69, 2.68, 2.68(2), 2.66, 2.62, 2.58, 2.50, 2.44
*†1044		B —	—	1	2.44
*†1045		B —	—	1	2.80
*†1046		B —	—	1	2.76
*1047	<i>obv.</i> IMP C ALLECTVS AVG	B 217	129	29	3.75, 3.45, 3.36, 3.34, 3.28, 3.27, 3.24, 3.22, 3.20, 3.17(2), 3.15, 3.11, 3.07, 3.04, 3.01, 2.99, 2.95, 2.94, 2.91(2), 2.89, 2.83, 2.77, 2.73, 2.65, 2.64, 2.61, 2.48
*†1048		B —	—	2	3.42, 2.89
E: COUNTERFEITS & MISCELLANEOUS					
Counterfeits (II)					
<i>'Gordian III'</i>					
	<i>obv.</i> IMP GORDIANVS PIVS FEL AVG		(RIC)		
*†1049	VICTORIA AVGG	Victory I	D2	—	1 3.77
<i>'Claudius II'</i>					
	<i>obv.</i> IMP C CLAVDIVS AVG				
*†1050	Blundered; Pax type?	D2?	—	1	2.17

Cat. No	Marks	Bust	RIC	Qty	Weight
<i>'Postumus'</i>					
<i>(Elmer)</i>					
<i>obv. IMP C POSTVMVS P F AVG</i>					
*1051 MINER FAVTR	Minerva 3	D1	as E.313	1	2.60
*†1052 P M [TRP III] COS III P P	Mars 2b	D1	as E.332	1	4.72
*†1053 PAX AVG running	Pax 4	D1	as E.333	2	3.46, 2.30
†1054 SALVS POSTVMI AVG	Salus 2	D1	as E.414	1	2.35
*†1055 PAX AVG standing	Pax 1	D1	as E.566	2	2.82, 2.19
<i>'Victorinus'</i>					
<i>obv. IMP C VICTORINVS P F AVG</i>					
*†1056 INVICTVS	Sol 7	D1	as E.683	1	2.88
<i>'Tacitus'</i>					
<i>(Estiot)</i>					
<i>obv. IMP C M CL TACITVS AVG</i>					
*†1057 AEQVITAS AVG	Aequitas 1	- - // 1 + +	D1	1117	1 3.21
<i>Miscellaneous (17)</i>					
1058 Tacitus/TEMPORVM FELICITAS	Lyon			1	cluster of eight coins, uncleaned
Tacitus/uncertain reverse	Lyon	D1		2	
Probus/uncertain reverse	Lyon, 6-9	D2		1	
Uncertain/PAX AVG	- V // X []			1	
Uncertain				3	
1059 Probus/COMES AVG	Lyon, 9: A - // -			1	cluster of four coins, uncleaned
Probus/FIDES MILITVM	Lyon?: - - // ?			1	
Diocletian/IOVI CONSERVAT	Lyon: ? - // -			1	
Uncertain				1	
1060 Tacitus/uncertain reverse	Lyon			1	cluster of three coins, uncleaned
Probus/TEMPOR FELICIT	Lyon, 9: 8 - // -			1	
Probus/CON[...]	Ticinum, 3: K41.			1	
	<i>obv. 2</i>				
1061 Tacitus/uncertain reverse	Lyon: <i>obv. 3</i>	D1		1	fused pair, uncleaned
Probus/uncertain reverse	Rome: <i>obv. 4</i>	K41.		1	

Notes to catalogue

11	Reverse proper to Valerian I	248	(= off. VI)
43	Z reversed	250	Unrecorded for Q?
77	Reversed epsilon. I. field	265/2	Emperor and Jupiter appear both to clasp the globe
85	X in r. field, not l.		
88	Obverse punctuated	266	E. and J. appear both to clasp the globe
97	Two pellets below bust on obv.	267/2-3	E. and J. appear both to clasp the globe
98	One pellet below bust, obv.	268	No sceptre. cf. Estiot 6690 (off. S)
119	Globe to left, by Aesculapius's right foot	288	Same rev. die as E.8303
130	Dies XVII/9, XXIX/36 and XXXIII/36	297	? a dolphin, or ? Δ
138	\ = branch symbol	314	Bust: cf. E.10783 in off. Δ
139	' = leaf symbol	315	Same dies as B.23a; same obv. die as BnF 1400
140	\ = branch symbol	328	Two same obv. die = B.63?
141	' = leaf symbol	332	Same dies as B.70a
142	Obverse, bust of Marius	334	Second coin same rev. die as B.75c
180	Z reversed	335	Same rev. die as B.76b
196	No sceptre	344	? same rev. die as B.87
201	Same dies as Estiot 1777	357-8	B reversed. I. field
208	No sceptre	364	One coin (364/18) A on rev. re-engraved over Δ
212	Obv. die link 212/3 = 213/3	372	Same dies as B.123a
245	Style appears to be Ticinum; cf. La Venèra 5808 and BnF 659, both different dies, attributed to Ticinum by Estiot	415	Obv 'Lyon' style: same dies as La Venèra 1923
		419	Engraver α
		420	Engraver α

421	Engraver β	611	Misprint in <i>RIC</i> : obv. 8 for 4
422	Engraver β	612	Misprint in <i>RIC</i> : S for s
423	'Hybrid' rev. marks?	614	Officina variant of 184
425	Same dies as E.2404	615	Officina variant of 201
427	Different rev. die from B.128	628	Misprint in <i>RIC</i> ?
443	Engraver β	644	Reverse legend variant
444	Engraver β?	645	Bust variant
445	Engraver β	651/3	One with 21 mm dies
446	Engraver β	652/1	19 mm rev. die
464	Mule with reverse of Issue 2	654	19 mm rev. die
473	Obv. type as B.206; new die? Same rev. die as B. Sup.II, 202α	658	21 mm dies: the form of bust (B1 with aegis) suggests that this may belong with the 'special bust' coins of Issue 3
474	Same obv. die as B.218c-d	667	22 mm dies
475	New obv. die?	669	22 mm dies?
476	Same obv. die as B.257a-b?	672	Shield with geometric decoration
477	Same dies as B.241a and c	676	Nude bust; spear, aegis; helmet
478	New obv. dies?	680	Shield: emperor riding r., leading troops
479	Same dies as B.210a	689	Bust and lettering place this here, not in issue 2
480/1	Same dies as B.211c	700	Cf. <i>RIC</i> 376, bust variant
480/2	Same obv. die as B.211d-e	701	Shield: troops
481	New obv. die?	702	Shield: troops
482	Same obv. die as B.235a-c (<i>FIDES MILITVM</i>); same dies as Ste-Pallaye hoard no. 2294 (now B. Sup.II, 244α)	724	I in r. field, not l.
483	New obv. die? Form of cuirass is as Issue 6	725	I in r. field, not l.
484	Bust dr. & cuir. from rear (corrects Bastien); same obv. die as B.243	727	I in r. field, not l.
486	Same dies as B.267c	740	I in l. field
490	Same obv. die as B.285a	763	Variant mark
494	/4 and /18 from same obverse die; note arrangement of 'wreath ties', Bastien 269a and c illustrates two further dies of this nature, unusual for Lyon	764	Cf. <i>RIC</i> 679 but caduceus
500	/24; obv. unpunctuated ? = B.299?	767	Radiate, cuir bust l., with <i>pugio</i> held in r. hand
501	Obv. punctuated: same die as B.300 and Ste-Pallaye no. 3017	768	Bust variant for <i>RIC</i> 609
503	Same rev. die as B.270b?	787	With aegis
504	/1: same dies as B.275b; /2: same obv. die as B.275b?	788	- S // XXI not in <i>RIC</i>
506	Same rev. die as B.301 and 311-12	799	Bust variety
516	Three from same obv. die	800	Obv. legend variant: in Aufbau
522	B reversed in r. field; same rev. die as B.400-1	807	Punctuated obv. legend: corrects B.455bis
525	C reversed in l. field	808	New obv. die?
527	C reversed in r. field	815	Reversed D in r. field
538	C reversed in l. field	868	Same dies as G.1477
539	C reversed in l. field	880	Reversed C in r. field
540	Same dies as B.408?	881	Engraver's error
542	Two from same obv. die	886	Reversed C in l. field
547	D reversed in r. field	892	Reversed C in l. field
550	Same rev. die as B.389a	900	Legend of issue 2/type of issue 3
551	(<i>RIC</i> : Siscia)	921	Bust variant for officina
552	(<i>RIC</i> : Siscia)	933	Obv. engraver's error and variant bust/legend combination
553	(<i>RIC</i> : Siscia)	946	Same obv. die as B.369d?
554	(<i>RIC</i> : Siscia)	954	Diocletian holds short sceptre
558	(<i>RIC</i> : Siscia)	955	Diocletian holds eagle-headed sceptre
559	(<i>RIC</i> : Siscia)	966	Mars r., not l.
560	<i>RIC</i> gives off Γ in error	975	Same dies as G.5944
561	(<i>RIC</i> : Siscia)	976	Same rev. die as G.6283
567	Bust variant of 243	985	Overstruck on Gallienus, Rome issue 6
570	Medusa head on shield	987	Overstruck on Tacitus, Lyon, B.121
574	Variant of 190	991	Rev. legend variant
590	Pellet in crescent	992	Rev. as <i>RIC</i> 413; obv. variant
594	Misprint in <i>RIC</i> : obv. 8 for 4	994	Rev. as <i>RIC</i> 412; obv. variant
605	Die flaw?	998	New rev. type for series
610	<i>RIC</i> gives off A: misprint?	1000	C 27 cites <i>RIC</i> 38 in error
		1002	Style is London
		1003	Same dies as specimen in Langtoft A hoard (<i>Treasure Annual Report 2000</i> , fig. 255, 7)
		1005	Same obv. die as Carson 2? C: triple portrait series, 7: same rev type but different die
		1007	Variant obv. legend for type

1008	Variant rev. legend	1040	Obv. legend new for Virtus type
1010	Galley with ram	1042	Victory on prow
1011	With ram; armed crew	1044	Bird on masthead
1012	No ram; obv. 20 mm die	1045	Animal head prow?
1013	No ram; armed crew	1046	Victory on prow
1016	VITRVS AVG	1048	Ram-headed prow?
1018	Variant mark	1049	Rev. proper to Valerian I: cast?
1021	Rowing boat, hide? Twin steering oars; crew armed	1050	Silvered
1022	Hide? Mast, twin steering oars; crew armed; no waves	1052	Silvered
1023	Hide? Mast, crew with shields	1053	Silvered
1024	Hide? Mast, twin steering oars; shields	1054	Silvered
1039	Unrecorded obv. legend?	1055	Silvered
		1056	Silvered
		1057	Same dies as E.1117: silvered

APPENDIX B: Q-RADIATES OF ALLECTUS

The following table provides the classification of 749 Q-radiates of Allectus, used as the basis of pp. 62–80 of this paper. Weights are given in grams, followed by the letter 'u' if the coin remains uncleaned, or by 'c' if the specimen is significantly affected by corrosion.

Cat.	NMW	Obv type	Bust	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
ALLECTUS: Q-radiates											
London											
Obv. IMP C ALLECTVS P F AVG											
Rev. VIRTVS AVG; - - // QL											
1. Galley to left, no mast											
1009	*3003	B	B1	L-	7	4	108	55	2.82		waves, blobs
	*3004	C	B1	L-	5	4	108	55	2.71		
2. Galley to right, no mast; waves, blobs											
1010	*3005	C	B1	R-	6	5	110	55	2.63		galley with ram
	3006	D	B1	R-	6	4	110	55	2.65 c		with ram
1011	3007	D	B1	R-	8	5	110	55	2.68	=3008	with ram; armed crew
	3008	D	B1	R-	8	5	110	55	2.27	=3007	with ram; armed crew
1012	*3009	B	B1	R-	7	7	110	55	2.97		no ram; obv. 20 mm die
1013	*3010	B"	B1	R-	6	6	110	55	2.70		no ram; armed crew
3. Galley to left, with mast and ram											
1014	*3011	A	D1	(1?)	5	5	112	55	3.12	o3012	waves, blobs
	*3012	A	D1	1	9	5	112	55	2.56	o3011	later state of obv. die
	3013	A	D1	1	9	4	112	55	2.85 c	o3014	
	3014	A	D1	1	7	4	112	55	3.09	o3013	
	*3015	A	D1	1	6	6	112	55	3.07		
	*3016	A	D1	2	8	0	112	55	3.25		
	*3017	A	D1	2	7	0	112	55	2.96	r3049	
	*3018	A	D1	(3b)	5	4	112	55	3.43	o3019	
	3019	A	D1	(3b)	6	4	112	55	3.05	o3018	
	3020	A	D1	(3b)	5	4	112	55	3.10		
	3021	A	D1	(3b)	5	4	112	55	3.40		
	3022	A/C	D1	3b	6	5	112	55	3.35	=3023	
	*3023	A/C	D1	3b	6	5	112	55	2.70	=3022	
	3024	A	D1	3b	6	6	112	55	2.75		
	*3025	A/C	D1	3b	6	5	112	55	2.81		(beard)
	*3026	A	D1	3c	5	3	112	55	3.23	r3256	later state of die
	3027	B	D1	(1)	5	4	112	55	2.88	o3028-9	17 mm dies
	3028	B	D1	(1)	5	4	112	55	2.70	o3027,29	17 mm obv. die
	*3029	B	D1	(3b/c?)	6	4	112	55	3.18	o3027-8	17 mm obv. die; rev. decorated stem
	*3030	B	D1	2/3b?	5	0	112	55	3.15	o3031-2	rev. a version of 2?

Cat.	NW	Obv. type	Bust	Rev. type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	*3031	B	D1	3c	6	4 ^o	112	55	2.89	<i>a3030-12</i>	
	*3032	B	D1	3	6	4	112	55	2.97	<i>a3030-1</i>	3c var: doubled stays, four waves
	*3033	C'	D1	1	8	4	112	55	2.81		17 mm obv. die
	*3034	C'	D1	3c	5	6	112	55	3.17		17 mm obv. die
1015	*3035	A	D2	(1)	4	4	113	55	2.60	<i>=3036</i>	
	3036	A	D2	(1)	4	4	113	55	3.22 c	<i>=3035</i>	
	*3037	A	D2	1	8	0	113	55	3.32	<i>a3038.46</i>	
	3038	A	D2	1	7	0	113	55	2.49	<i>a3037.46</i>	
	3039	A	D2	1	8	0	113	55	3.02		
	*3040	A	D2	(3arc)	4	3	113	55	3.86		
	3041	A	D2	(2)	5	4	113	55	2.39 c		
	*3042	A	D2	(3a)	4	4	113	55	2.73		oars doubled
	3043	A	D2	7a	5	0	113	55	2.57		
	*3044	A	D2	3b	7	4	113	55	2.70		
	3045	A	D2	3b	5	5	113	55	3.02 u		
	3047	B	D2	2	6	5	113	55	2.89		
	3048	B"	D2	3c	6	5	113	55	2.63	<i>a3049</i>	
	*3049	B"	D2	2	7	0	113	55	3.58	<i>a3048: r 3017</i>	
	*3050	B"	D2	(u)	4	4 ^o	113	55	3.46		curved back prow: cf. 3123; 3125-6, 3262 [QV] error: VITRVS AVG
1016	*3046	A	D2	3b	4	4	113	55	3.13	<i>a3037-8</i>	
1017	*3051	A	B1	(1)	5	4	111	55	3.04	<i>a3066</i>	
	3052	A	B1	1	8	0	111	55	3.41 c		
	3053	A	B1	2	6	0	111	55	3.20		
	3054	A/C	B1	2	6	0	111	55	2.99		(beard)
	3055	A	B1	2	6	0	111	55	2.92		
	3056	A	B1	2	7	0	111	55	2.86	<i>a3062</i>	
	*3057	A	B1	2	6	0	111	55	2.75	<i>a3064</i>	
	3058	A	B1	3a	5	5	111	55	2.89		
	3059	A	B1	3a	6	4	111	55	2.46		
	3060	A	B1	3b	5	4 ^o	111	55	3.03		
	3061	A	B1	3b	5	6	111	55	2.93 u		
	*3062	A	B1	3b	6	5	111	55	2.67	<i>a3056</i>	
	3063	A	B1	3b	6	?	111	55	2.67 c		
	*3064	A	B1	3b	5	5	111	55	2.62	<i>a3057</i>	
	*3065	A	B1	3b	5	5	111	55	2.39		
	*3066	A	B1	(3c)	5	0	111	55	2.82	<i>a3051</i>	
	*3067	A	B1	3	5	3	111	55	2.75		rev 3c but plain stern
	*3068	B	B1	(3)	5	0	111	55	3.25		
	3069	B	B1	(1)	?	6 ^o	111	55	2.95 c		
	*3070	B	B1	(1)	7	4	111	55	2.99		
	3071	B	B1	(12)	5	4	111	55	2.84	<i>a3095</i>	
	3072	B	B1	(1)	4	?	111	55	2.82		
	3073	B	B1	1	8	4	111	55	3.98		
	3074	see after 3122									
	*3075	B	B1	1	5	0	111	55	3.31		20 mm obv die
	3076	B	B1	1	9	0	111	55	3.03		
	3077	B	B1	1	8	?	111	55	2.96 u		
	3078	B	B1	1	7	0	111	55	2.83		
	3079	B	B1	1	9	6	111	55	2.75		
	3080	B	B1	1	9	0	111	55	2.69		
	3081	B	B1	1	7	4 ^o	111	55	2.66 u		
	3082	B	B1	(2)	6	4	111	55	2.85		
	*3083	B/C	B1	2	8	4	111	55	4.48		(beard)
	3084	B	B1	2	6	0	111	55	3.77		
	*3085	B	B1	2	6	5	111	55	3.46	<i>=3086</i>	
	3086	B	B1	2	6	5	111	55	3.23	<i>=3085</i>	
	3087	B	B1	2	5	5	111	55	3.31		
	3088	B	B1	2	5	4	111	55	2.91		
	3089	B	B1	2	6	4	111	55	2.67		
	*3090	B	B1	2	7	4	111	55	2.60	<i>a3117</i>	

<i>Cat.</i>	<i>NMW</i>	<i>Obv type</i>	<i>Bust</i>	<i>Rev type</i>	<i>Oars</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
	3091	B	B1	2	7	?	111	55	2.50 c		
	3092	B	B1	2	6	0	111	55	2.30		
	3093	B	B1	2	6	0	111	55	2.09		
	3094	B	B1	2	6	0	111	55	2.08		
	*3095	B	B1	(3a)	6	0	111	55	3.07	<i>o3071</i>	oars doubled
	*3096	B	B1	(3a)	6	4	111	55	2.79		but single waves
	3097	B	B1	3a	7	6	111	55	3.26		
	3098	B	B1	3a	8	4?	111	55	3.03		
	3099	B	B1	3a	7	4?	111	55	2.99		
	*3100	B	B1	3a	6	6	111	55	2.95		note beard at neck
	3101	B	B1	3a	6	0	111	55	2.81		
	3102	B	B1	3b	5	?	111	55	3.02		
	*3103	B	B1	3b	5	4	111	55	3.36	<i>o3107</i>	
	3104	B	B1	3b	5	4?	111	55	3.08		
	3105	B	B1	3b	5	7	111	55	3.03		oars doubled
	*3106	B	B1	3b	5	5	111	55	2.98		no waves
	*3107	B	B1	3b	5	0	111	55	2.92	<i>o3103</i>	
	3108	B	B1	3b	6	5	111	55	2.85		
	3109	B	B1	3b	5	6	111	55	2.79		
	3110	B'	B1	3b	5	6?	111	55	2.69		
	*3111	B	B1	(3c)	5	?	111	55	2.94		(3c), but single waves
	3112	B	B1	(3c)	7	0	111	55	2.91		(3a/b): stays doubled, single waves
	*3113	B	B1	(3c)	6	4	111	55	2.64	<i>r3243</i>	stays doubled; waves, blobs
	3114	B	B1	3c	5	6?	111	55	3.38	<i>r3118</i>	
	3115	B	B1	3c	5	4?	111	55	3.23		
	3116	B'	B1	3c	5	0	111	55	3.03		
	3117	B	B1	3c	7	4	111	55	2.86	<i>o3090</i>	oars doubled
	3118	B	B1	3c	5	6?	111	55	2.19	<i>r3114</i>	
	*3119	B	B1	3c	6	(3?)	111	55	2.69	<i>=3120</i>	oars doubled; no steering oar
	3120	B	B1	3c	6	3?	111	55	2.99 c	<i>=3119</i>	oars doubled; no steering oar
	*3121	B	B1	3	5	5	111	55	3.25		3c, but curved back prow
	3124	B	B1	3b	5	5	111	55	2.79		
	3121	B'	B1	3	5	4	111	55	2.25 u	<i>=3122;o3074</i>	stays tripled
	*3122	B'	B1	3	5	4	111	55	2.49	<i>=3121;o3074</i>	stays tripled
	3074	B'	B1	1	8	4	111	55	3.55 u	<i>o3121-2</i>	
	3128	B'	B1	3b	7	4?	111	55	4.07		
	*3125	B''	B1	(u)	4	4	111	55	2.89	<i>o3126</i>	curved back prow
	*3126	B''	B1	(u)	4	4	111	55	3.31	<i>o3125</i>	curved back prow
	3127	B''	B1	2	6	0	111	55	2.69		
	*3129	B''	B1	3a	7	4	111	55	2.79	<i>o3130-31</i>	crew forward of mast
	3130	B''	B1	3a	6	3	111	55	2.87	<i>o3129,31</i>	crew forward of mast
	3131	B''	B1	3a	6	4?	111	55	3.06	<i>o3129-30</i>	
	3132	B''	B1	3b	5	5	111	55	2.81		
	*3133	B''	B1	3b	5	4	111	55	3.31	<i>r3158</i>	
	*3134	B'?	B1	2	7	0	111	55	2.96 u		decorated cuirass; rev. furled sails?
	3135	B'?	B1	3a/b?	8	4	111	55	3.13 u		
	*3136	C	B1	1	7	0	111	55	3.19	<i>=3137</i>	hair sideways; oars doubled
	3137	C	B1	1	7	0	111	55	2.76	<i>=3136</i>	hair sideways; oars doubled
	3138	C	B1	1	8	0	111	55	2.40		oars doubled
	3139	C	B1	1	8	0	111	55	3.16		oars doubled
	3140	C	B1	1	7	0	111	55	3.48		
	3141	C	B1	1	7	0	111	55	2.76	<i>=3142</i>	oars doubled
	3142	C	B1	1	7	0	111	55	2.67 c	<i>=3141</i>	oars doubled
	3143	C	B1	1	7	0	111	55	2.84 c		oars doubled
	*3144	C	B1	2	6	0	111	55	3.77		furled sails?
	3145	C	B1	2	7	0	111	55	3.58		
	3146	C	B1	2	6	0	111	55	3.54 c		
	3147	C	B1	2	6	0	111	55	3.43	<i>=3154</i>	
	3148	C	B1	2	7	0	111	55	3.25		
	*3149	C	B1	2	7	0	111	55	3.23		
	3150	C	B1	2	5	0	111	55	3.14		

Cat.	NMW	Obv type	Bust	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	3151	C	B1	2	6	?	111	55	3.10 c		
	3152	C	B1	2	6	0	111	55	3.08		
	3154	C	B1	2	6	0	111	55	2.95	=3147	
	3155	C	B1	2	8	4	111	55	2.43		crew armed
	3156	C	B1	2	6	0	111	55	2.36		
	3153	C	B1	3b	6	6	111	55	3.00		
	3157	C	B1	3b	5	5	111	55	3.25		
	*3158	C	B1	3b	5	4	111	55	3.02	o3167:r3133	
	3159	C	B1	3b	5	4	111	55	2.74		
	3160	C	B1	3b	5	0	111	55	2.74		
	3161	C	B1	3b	5	?	111	55	2.74 c	=3165	
	3162	C	B1	3b	5	4	111	55	2.67		
	3163	C	B1	3b	6	4	111	55	2.62		
	3164	C	B1	3b	5	4	111	55	2.56 c		
	3165	C	B1	3b	5	?	111	55	2.46 c	=3161	
	3166	C	B1	3b	5	4	111	55	2.36		
	*3167	C	B1	3c	5	4	111	55	3.63	o3158	
	*3168	C	B1	3c	5	5	111	55	3.23	=3169	
	3169	C	B1	3c	5	5	111	55	2.87	=3168	
	*3170	C	B1	3	4	0	111	55	2.93	=3171:r3259	sketchy lettering, rev.
	3171	C	B1	3	4	0	111	55	2.75	=3170:r3259	sketchy lettering, rev.
	3172	C	B1	3	5	6	111	55	2.79		
	*3173	C	B1	(u)	7	3	111	55	3.62		galley similar to L- but with mast: waves, blobs
	*3174	C	B1	1	8	6	111	55	2.43		
	3175	C	B1	2	6	6	111	55	3.26	=3176	
	3176	C	B1	2	6	6	111	55	2.51	=3175	
	3177	C	B1	2	6	4	111	55	2.99	o3185	17 mm obv die
	3178	C	B1	2	6	6	111	55	2.88	o3179	
	3179	C	B1	3b	6	4	111	55	3.65	o3178	
	3180	C	B1	3b	4	5	111	55	3.31	=3181	
	3181	C	B1	3b	4	?	111	55	2.79 c	=3180	
	3182	C	B1	3b/c	4	0	111	55	2.83		17 mm obv die
	3183	C	B1	3c	6	5	111	55	3.40	=3184	17 mm obv die
	*3184	C	B1	3c	6	5	111	55	2.80	=3183	17 mm obv die
	3185	C	B1	3c	6	4	111	55	2.72	o3177	17 mm obv die
	3186	C	B1	3c	4	5?	111	55	2.69		
	3187	C	B1	3c	5	4	111	55	2.54		17 mm obv die
	3188	see before 3218									
	3189	D	B1	(1)	5	?	111	55	2.80 c	o3229	oars doubled
	3190	see before 3230									
	3191	D	B1	1	9	5	111	55	2.92 c	=3192;o3211,20	
	*3192	D	B1	1	9	5	111	55	2.34	=3191;o3211,20	
	3193	D	B1	1	9	0	111	55	3.04		
	3194	D	B1	1	9	6	111	55	2.30		
	3195	D	B1	1	9	4	111	55	2.87		
	3196	D	B1	1	9	0	111	55	2.49		
	3197	D	B1	1	8	4	111	55	3.25	=3198	crew armed
	*3198	D	B1	1	8	4	111	55	2.83	=3197	crew armed
	3199	D	B1	1	8	0	111	55	3.54	=3200-1	
	3200	D	B1	1	8	0	111	55	3.34	=3199,3201	
	3201	D	B1	1	8	0	111	55	2.94	=3199,3200	
	3202	D	B1	1	8	4	111	55	2.91		
	3203	D	B1	1	8	0	111	55	3.17		
	3204	D	B1	1	8	0	111	55	2.33		
	3205	D	B1	1	7	0	111	55	4.05	=3206	
	3206	D	B1	1	7	0	111	55	3.67	=3205	
	3207	D	B1	1	7	4	111	55	3.08 c		crew armed
	*3208	D	B1	1	7	4	111	55	2.83		crew armed
	3209	D	B1	1	6	6	111	55	2.64		
	3210	D	B1	2	8	4	111	55	3.01		
	3211	D	B1	2	7	4	111	55	3.15	o3191-2;3220	
	3212	D	B1	2	7	4	111	55	2.72		

<i>Cat.</i>	<i>NMW</i>	<i>Obv type</i>	<i>Bust</i>	<i>Rev type</i>	<i>Oars</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
	*3213	D	B1	2	7	0	111	55	2.82	<i>o3249-50,3260</i>	
	*3214	D	B1	2	6	4	111	55	3.46		no waves
	3215	D	B1	2	6	0	111	55	3.22		
	3216	D	B1	2	6	4	111	55	2.92		
	*3217	D	B1	2	6	4	111	55	2.88		
	3188	D	B1	(3a?)	5	4	111	55	2.82 c		oars doubled
	3218	D	B1	3a	7	6	111	55	2.76	<i>o3219</i>	
	3219	D	B1	3a	7	0?	111	55	2.50 c	<i>o3218</i>	
	3220	D	B1	3a	7	0	111	55	2.42	<i>o3191-2:3211</i>	
	3221	see after 3242									
	3222	D	B1	3a	6	6	111	55	3.12		
	*3223	D	B1	3a	6	4	111	55	2.91	=3224	
	3224	D	B1	3a	6	4	111	55	2.73	=3223	
	3225	D	B1	3a	6	6	111	55	2.80 c		
	3226	D	B1	3a	5	6	111	55	3.12		
	3227	D	B1	3a	5	5	111	55	2.83		
	*3252	D	B1	3a	6	5	111	55	2.83		decorated cuirass
	*3228	D	B1	(3?)	6	4	111	55	3.21		no waves
	*3229	D	B1	(3b?)	4	4	111	55	3.16	<i>o3189</i>	no waves
	3190	D	B1	(3b)	5	?	111	55	2.32 c		oars doubled
	3230	D	B1	3b	6	5	111	55	3.36		
	3231	D	B1	3b	6	?	111	55	2.97 c		
	3232	D	B1	3b	6	4	111	55	2.96 c		
	3233	D	B1	3b	6	6	111	55	2.87		
	3234	D	B1	3b	5	5?	111	55	2.80		
	3235	D	B1	3b	6	1?	111	55	2.64		
	3236	D	B1	3b	5	5	111	55	3.44		
	3237	D	B1	3b	5	5	111	55	3.39		
	3238	D	B1	3b	5	4	111	55	2.78 u		
	3239	D	B1	3b	5	4	111	55	2.65		
	3240	D	B1	3b	5	?	111	55	2.68		
	3241	D	B1	3b	5	5	111	55	2.62		
	3242	D	B1	3b	5	0?	111	55	2.53		
	3221	D	B1	3b/c	6	5	111	55	3.22		
	*3243	D	B1	(3)	6	4	111	55	2.89	<i>r3113</i>	waves, blobs
	3244	D	B1	(3)	4	4	111	55	3.39	=3245	
	*3245	D	B1	(3)	4	4	111	55	2.78	=3244	
	*3246	D	B1	(1/3c?)	4	4	111	55	3.23		
	3247	D	B1	(3c)	5	4	111	55	2.64		
	*3248	D	B1	(3c)	5	5	111	55	2.62		
	*3249	D	B1	3c	5	5	111	55	3.85	=3250; <i>o3213,3260</i>	
	3250	D	B1	3c	5	5	111	55	3.11 u	=3249; <i>o3213,3260</i>	
	3251	D	B1	3c	6	4	111	55	2.91		no steering oar
	3252	see after 3227									
	3253	D	B1	3c	6	3	111	55	2.47		
	3254	D	B1	3c	6	4	111	55	2.44		
	3255	D	B1	3c	5	6	111	55	3.12		
	3256	D	B1	3c	5	4	111	55	3.06	<i>r3026</i>	
	3257	D	B1	3c	5	4	111	55	2.46		
	3258	D	B1	3c	5	4	111	55	2.74		
	3259	D	B1	3	4	0	111	55	3.32	<i>r3170-71</i>	
	*3260	D	B1	3	4	5	111	55	3.12	<i>o3249-50,3213</i>	
	3261	D	B1	3	4	?	111	55	2.63 u		
1018	*3262	D	B1	(u)	4	5	—	—	3.19		variant with mark // QV : no waves

4. Galley to right, with mast and ram

1019	*3263	A	D1	R	6	6	—	55	2.59		
1020	3264	B	B1	R	7	7	—	55	2.88		
	*3265	B	B1	R	7	6	—	55	2.94		
	*3266	B	B1	R	7	6	—	55	2.85	=3267	

<i>Cat.</i>	<i>NM^W</i>	<i>Obv type</i>	<i>Boat</i>	<i>Rev type</i>	<i>Oars</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
	3267	B	B1	R	7	6	—	55	2.57 c	=3266	
	3268	B	B1	R	7	6	—	55	2.66		
	3269	B ⁺	B1	R	6	5	—	55	3.45 c	=3270	
	*3270	B ⁺	B1	R	6	5	—	55	3.05	=3269	
	3271	B ⁺	B1	R	8	6 ⁺	—	55	3.11		
	3272	B ⁺	B1	R	7	5	—	55	3.70		waves, blobs
	*3273	B ⁺	B1	R	5	5	—	55	3.16		
	*3274	C	B1	R	7	7	—	55	3.12		
	3275	C	B1	R	7	6	—	55	3.87		waves, blobs
	3276	C	B1	R	7	6 ⁺	—	55	2.69		waves, blobs
	*3277	C	B1	R	7	6	—	55	2.50	<i>o</i> 3278-79	
	*3278	C	B1	R	6	5	—	55	2.62	<i>o</i> 3277, 79	
	3279	C	B1	R	6	?	—	55	2.50 c	<i>o</i> 3277-78	
	3280	C	B1	R	6	6	—	55	3.89		
	*3281	C	B1	R	6	5	—	55	3.08		
	3282	C	B1	R	6	6	—	55	2.50		
	3283	C	B1	R	5	0	—	55	2.78		
	3284	C ⁺	B1	R	7	5	—	55	2.94		
	3285	D	B1	R	7	4 ⁺	—	55	3.11		
	3286	D	B1	R	7	5	—	55	3.66	<i>o</i> 3287	
	3287	D	B1	R	6	5	—	55	3.16	<i>o</i> 3286	
	3288	D	B1	R	6	?	—	55	2.52 c		
	3289	D	B1	R	6	6	—	55	2.76 c		
5a. Boat to left, no mast											
1021	*3290	C	B1	L ⁺	5	5	(108)	55	3.55		rowing boat, hide?, twin steering oars, crew armed
5b. Boat to left, mast											
1022	*3291	D ⁺	B1	L ⁺	5	6	(111)	55	3.54		hide?, twin steering oars; crew armed; no waves
1023	*3292	D	B1	L ⁺	5	5	(111)	55	2.91		hide?, crew with shields
1024	*3293	D	B1	L ⁺	5	5	(111)	55	2.76 c		hide?, twin steering oars; shields
6. Light craft to right, with mast											
1025	*3294	B ⁺	B1	R ⁺	6	5	—	55	2.89		
C Mint											
Rev. LAETITIA AVG; -- // QC											
1a. Galley to left, no cabin; waves											
<i>Obv.</i> IMP C ALLECTVS P F I AVG; B1											
1026	*3295	α		L	6	0	—	—	3.14	<i>r</i> 3296	oars doubled; high-shouldered bust
<i>Obv.</i> IMP C ALLECTVS P F AVG; B1											
1027	*3296	α		L	6	0	214	124	3.10	<i>r</i> 3295	oars doubled
	*3297	β		L	5	4 ⁺	214	124	3.07 c	=3298	oars doubled; beard on neck
	3298	β		L	5	4 ⁺	214	124	2.78 c	=3297	oars doubled; beard on neck
	*3299	ε		L	5	0	214	124	3.16	=3300; <i>o</i> 3331	oars doubled; 'vest'
	*3300	ε		L	5	0	214	124	3.04	=3299; <i>o</i> 3331	oars doubled; 'vest'
<i>Obv.</i> IMP C ALLECTVS P AVG; B1											
1028	*3301	β		L	4 ⁺	0	—	125	3.10	<i>o</i> 3341	oars doubled; no pteriges
	*3302	δ		L	5	4	—	125	3.04		oars doubled; tall thin head
1b. Galley to right, no cabin; waves											
<i>Obv.</i> IMP C ALLECTVS P I FE AVG; B1											
1029	*3303	ε		2a	4	4	—	127	3.31	<i>o</i> 3304	oars doubled; earlier state of obv.
	*3304	ε		2a	4	4	—	127	3.33	<i>o</i> 3303	oars doubled; later state of obv.

<i>Cat.</i>	<i>NMW</i>	<i>Obv. type</i>	<i>Rev. type</i>	<i>Oars</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
<i>Obv. IMP C ALLECTVS P F I AVG; B I</i>										
1030	*3305	β	3	5	4	212	-	3.01	<i>o3306</i>	no pieriges
	*3306	β	3	4	4	212	-	3.07	<i>o3305</i>	no pieriges
	*3307	γ	2a	4	4	212	-	2.73	<i>o3308</i>	oars doubled; added rivets, obv
	3308	γ	4a	5	6	212	-	2.99	<i>o3307</i>	oars doubled; later state of obv.
	*3309	γ	2a	4	4?	212	-	2.97	<i>r3330</i>	added rivets, obv
<i>Obv. IMP C ALLECTVS P F I AVG; B I</i>										
1031	*3310	α	1b	7	4	210	124	2.99		
	*3311	α	2b	5	4	210	124	2.93		
	3312	α	4a	8	6	210	124	3.31		
	*3313	α	5a	5?	4	210	124	3.14	=3314; <i>r3317</i>	
	3314	α	5a	5?	4	210	124	3.00	=3313; <i>r3317</i>	
	*3315	β	1b	7	4	210	124	2.79 c	<i>o3356</i>	obv link to group 2; earlier state
	3316	β	3	4	0	210	124	2.89		
	3317	β	5a	5?	4	210	124	3.06	<i>r3313-14</i>	
	3318	γ	1b	7	4	210	124	3.18		
	*3319	γ	1b	8	4	210	124	2.76		
	3320	γ	2a	4	4	210	124	2.98	=3321	oars doubled
	*3321	γ	2a	4	4	210	124	3.02	=3320	oars doubled
	3322	γ	2a	4	5	210	124	3.27		oars doubled
	*3323	γ	5d	7	4	210	124	3.07		
	3324	δ	2a	4	4	210	124	3.01		oars doubled
	*3325	δ	4b	7	6	210	124	3.08	<i>o3326</i>	
	3326	δ	4b	7	5	210	124	3.16	<i>o3325</i>	
	*3327	ε	2b	5	4	210	124	3.67		
	3328	ε	4a	7	4	210	124	3.14	<i>o3329</i>	
	*3329	ε	4a	4	7	210	124	3.12	<i>o3328</i>	oars doubled
	*3330	ε	2a	5	4	210	124	3.48	<i>r3309</i>	oars doubled
	3331	ε	1a	?	4?	210	124	4.15 c	<i>o3299-3300</i>	
	3332	ε	1b	8	4	210	124	3.19		
	3333	ε	2b	5	4	210	124	3.44	<i>o3334</i>	
	3334	ε	5b	5	4	210	124	2.85	<i>o3333; r3336</i>	
<i>Obv. IMP C ALLECTVS P F I AVG; B I</i>										
1032	*3335	α	1a	6	4	211	125	3.01	<i>r3337</i>	
	*3336	α	5b	5	4	211	125	2.76	<i>r3334</i>	
	3337	β	1a	6	4	211	125	3.04	<i>r3335</i>	
	3338	β	3	4	4	211	125	3.23		oars doubled
	3339	β	2b	?	4	211	125	2.73		
	3340	β	3	4	4	211	125	2.42		
	3341	β	4a	8	4	211	125	2.79	<i>o3301</i>	
	3342	γ	2b	5	4	211	125	3.12		
	*3343	γ	3	4	4	211	125	3.46		
	3344	δ	3	4	4	211	125	3.34		
	3345	ε	3	4	4	211	125	2.73		
	3346	ε	3	4	4	211	125	3.03	<i>o3347</i>	oars doubled
	*3347	ε	5c	5	4	211	125	3.21	<i>o3346</i>	
	*3348	ε	5e	7	5	211	125	3.07		square head
	3349	ε	4b	6	6?	211	125	2.96		
	*3350	ε	5f	4	5	211	125	3.03	=3403	oars doubled
	3403	ε	5f	4	5	211	125	3.16 u	=3350	oars doubled
2. Galley to right, no cabin; no waves										
<i>Obv. IMP C ALLECTVS P F I AVG; B I</i>										
1034	3351	α	4	4	4	210	124	3.34		oars doubled
	3352	α	3	5	7	210	124	3.33		
	3353	α	1	8	4	210	124	2.81		
	*3354	β	2a	7	4	210	124	2.96		
	3355	β	2a	6	5	210	124	2.83		
	*3356	β	5	6	4	210	124	3.13	<i>o3315</i>	obv link to group 1b; later state

Cut	NMW	Obs. type	Rev. type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	3357	β	5	8	4	210	124	3.14		
	3358	γ	3	4	5	210	124	2.76	<i>o3359-60</i>	
	3359	γ	3	5	4	210	124	2.58	<i>o3358.60</i>	
	3360	γ	5	7	4	210	124	2.93	<i>o3358-59</i>	
	3361	γ	3	6	4	210	124	3.14	<i>=3362; o3363-65</i>	
	3362	γ	3	6	4	210	124	2.65	<i>=3361; o3363-65</i>	
	*3363	γ	3	6	4	210	124	3.53	<i>o3361-62; 3364-65</i>	
	3364	γ	5	7	4	210	124	3.13	<i>=3365; o3361-63</i>	six oars doubled
	*3365	γ	5	7	4	210	124	3.10	<i>=3364; o3361-63</i>	six oars doubled
	3366	ε	2a	7	4	210	124	2.86 u	<i>=3367</i>	
	3367	ε	2a	7	4	210	124	3.24	<i>=3366</i>	
	3368	ε	5	8	6	210	124	2.98		some oars doubled
<i>Obs. IMP C ALLECTVS P AVG: BI</i>										
1035	*3369	α	2b	6	4	211	125	3.04	<i>o3370; r3378</i>	crew armed?
	3370	α	2b	5	4	211	125	2.62	<i>o3369</i>	
	3371	α	2b	6	4	211	125	2.84		
	3372	α	1	6	4	211	125	3.01	<i>=3373</i>	
	3373	α	1	6	4	211	125	3.09	<i>=3372</i>	
	3374	α	5	8	5	211	125	3.22		
	*3375	α	6a	4?	4	211	125	3.09	<i>o3376</i>	
	*3376	α	6b	5	6?	211	125	2.85	<i>o3375; r3401</i>	
	*3377	β	4	4	5	211	125	3.42		
	*3378	β	2b	6	4	211	125	2.91	<i>r3369</i>	crew armed?
	3379	β	5	7	5	211	125	3.00		
	3380	γ	4	4	4	211	125	3.02	<i>=3381; o3382</i>	
	*3381	γ	4	4	4	211	125	3.20	<i>=3380; o3382</i>	
	*3382	γ	4	4	4	211	125	3.69	<i>o3380-81</i>	
	3383	γ	4	4	4	211	125	3.40	<i>r3390-1</i>	
	3384	γ	4	4	4	211	125	2.74	<i>o3385</i>	
	3385	γ	4	4	4	211	125	2.79	<i>o3384</i>	
	3386	γ	2a	4	4	211	125	3.08		oars doubled
	3387	γ	5	7	4	211	125	2.72		
	*3388	γ	6c	6	4	211	125	3.35		
	3389	δ	5	7	5	211	125	3.43		
	3390	ε	4	4	4	211	125	2.93	<i>=3391; r3383</i>	
	*3391	ε	4	4	4	211	125	2.89	<i>=3390; r3383</i>	
	3392	ε	4	4	4	211	125	2.80		
	3393	ε	4	4	4	211	125	2.97		
	3394	ε	4	4	6	211	125	3.07		
	3395	ε	3	5	4	211	125	2.86		
	3396	ε	1	8	?	211	125	3.35 c		oars doubled
	3397	ε	1	7	6	211	125	3.14		oars doubled
	3398	ε	1	7	7	211	125	2.85	<i>o3399</i>	oars doubled
	3399	ε	1	6	6	211	125	3.30	<i>o3398</i>	oars doubled
	3400	ε	5	6	4	211	125	2.92		oars doubled
	3401	ε	6b	5	6?	211	125	3.00	<i>r3376</i>	
	*3402	ε	6d	4	4	211	125	3.32		oars doubled
	3403	see after 3350								
<i>Obs. IMP C ALLECTVS AVG: BI</i>										
1036	3404	α	3	4	4	-	126	2.88 u	<i>o3405</i>	
	3405	α	3	6	6	-	126	3.71 u	<i>o3404</i>	
	*3406	α	1	7	7	-	126	2.73		oars doubled
	*3407	α	5	6	4	-	126	3.28		
	3408	β	2a	6	?	-	126	2.88	<i>o3409-11</i>	
	*3409	β	2a	4	0	-	126	2.91	<i>o3408, 10-11</i>	
	*3410	β	2a	6	4	-	126	3.05	<i>o3408-9, 11</i>	
	*3411	β	2a	7	4	-	126	2.64	<i>o3408-10</i>	
	*3412	β	1	7	6	-	126	2.94		oars doubled
	3413	β	1	7	6	-	126	3.45	<i>=3414</i>	oars doubled
	3414	β	1	7	6	-	126	2.74 u	<i>=3413</i>	oars doubled
	3415	β	1	6	6	-	126	3.18		oars doubled

Cat.	NMW	Obv type	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	3416	γ	4	4	4	–	126	2.94		
	3417	γ	2a	5	4	–	126	3.14 u		
	3418	γ	5	6	4	–	126	3.32		
	*3419	δ	2a	6	4	–	126	3.06		
	*3420	δ	5	7	4	–	126	2.51		
	3421	ε	5	7?	4	–	126	2.61 c		
	Obv. IMP ALLECTVS P AVG; B1									
1037	*3422	γ	6e	4	7	–	–	2.60		obv. added rivets; no 'vest'
	3. Galley to right, with cabin; no waves									
	Obv. IMP C ALLECTVS AVG; B1									
1038	*3423	δ	7	7	6	–	–	3.20		rev is Virtus type 1, but to right
	Rev. VIRTVS AVG; --//QC									
	Galley to left, with cabin; no waves									
	Obv. IMP C ALLECTVS P FEL AVG; B1									
1039	3424	δ	6	6	6	–	–	3.21	=3425	unrecorded obv legend?
	*3425	δ	6	6	6	–	–	2.97	=3424	unrecorded obv legend?
	Obv. IMP C ALLECTVS P F I AVG; B1									
1040	*3426	α	1	7	5	–	–	3.24		obv. legend new for Virtus type
	*3427	ε	8c	5	4	–	–	3.02		obv. legend new for Virtus type
	Obv. IMP C ALLECTVS P F AVG; B1									
1041	*3428	α	1	9	7	215	128	2.99	o3476	
	3429	α	1	7	7	215	128	2.60 c	r3432	
	*3430	β	1	9	5	215	128	2.80	o3455	
	*3431	β	1	7	5?	215	128	2.67	o3507,3578	
	3432	δ	1	7	5	215	128	3.12	r3429	
	3433	δ	1	8	4	215	128	3.08		
	3434	δ	1	9	3	215	128	2.76		
	*3435	α	2	6	5	215	128	2.89	r3441	
	3436	β	2	8	6?	215	128	2.78		
	3437	β	2	7	5	215	128	3.06		no steering oar
	3438	β	2	6	4	215	128	2.98 c		
	3439	γ	2	6	6	215	128	3.52		
	3440	δ	2	7	5	215	128	2.78 u		
	3441	δ	2	7	5	215	128	3.14	r3435	
	*3442	ε	2	7	5	215	128	3.00	r3637	
	*3443	ε	2	7	4	215	128	3.00	o3444-48,3614; r3640	no steering oar; earliest state of obv.
	3444	ε	2	6	4	215	128	2.85 u	=3445-46; o3443,47-48,3614	
	3445	ε	2	6	4	215	128	2.90	=3444,46; o3443,47-48,3614	
	*3446	ε	2	6	4	215	128	2.57	=3444-45; o3443,47-48,3614.	latest state of obv
	*3447	ε	2	6	3	215	128	3.27	o3443-46,48,3614; r3654-6	
	3448	ε	2	6	?	215	128	2.51 c	o3443-47,3614	
	*3449	ε	2	6	4	215	128	3.12	o3612-13	
	*3450	δ	2'	6	4	215	128	3.27	=3451	prows varies
	3451	δ	2'	6	4	215	128	2.91	=3450	prows varies
	*3452	α	3	6	7	215	128	3.22	o3501	
	3453	α	3	7	7	215	128	2.96	=3454	
	3454	α	3	7	7	215	128	2.75 u	=3453	
	3455	β	3	5	6	215	128	3.27	o3430	
	*3456	β	3	5	5	215	128	2.91		
	3457	β	3	5	5?	215	128	3.04		
	3458	γ	3	5	6	215	128	2.74	=3459; o3567	

Cat	NMW	Obs type	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	3459	γ	3	5	6	215	128	3.03	≈3458; o3567	
	3460	γ	3	5	6 ³	215	128	3.03		rev. d/s
	*3461	δ	3	5	6	215	128	3.07		
	3462	δ	3	5	6	215	128	3.13	o3463	
	3463	δ	3	5	6	215	128	2.76	o3462	
	3464	δ	3	5	6	215	128	3.05		
	3465	δ	3	5?	5	215	128	2.55 c		
	3466	δ	3	5	6	215	128	2.73		
	3467	δ	3	5	6	215	128	2.87	o3468	
	*3468	δ	3	5	6	215	128	3.14	o3467	
	3469	δ	3	5	6	215	128	3.39		
	*3470	δ	3	5	6?	215	128	3.19		
	3471	δ	3	5	8?	215	128	2.69		
	3472	ε	3	6	7	215	128	2.88		
	*3473	ε	3	5	6	215	128	3.18		
	3474	ε	3	5	7	215	128	3.01		
	3475	ε	3	5	7	215	128	2.87		
	*3476	α	3 ^{iv}	6	6	215	128	3.15	o3428	
	3477	α	4	5	6	215	128	2.60 u	o3478	
	3478	α	4	5	6	215	128	2.61	o3477	
	3479	β	4	5	6	215	128	2.87		
	3480	β	4	5	6	215	128	2.65	r3486	
	3481	β	4	5	5	215	128	3.20		
	3482	β	4	5	6	215	128	3.05	o3483-84	
	3483	β	4	5	6	215	128	3.63	≈3484; o3482; r3485	
	*3484	β	4	5	6	215	128	3.26	≈3483; o3482; r3485	
	*3485	β	4	5	6	215	128	2.80	o3528, 3555ff., r3483-84	
	3486	β	4	5	6	215	128	3.51	r3480	
	*3487	γ	4	5	6	215	128	2.95	r3675	
	3488	γ	4	5	6	215	128	2.99 u		
	3489	γ	4	5	6	215	128	3.03 u	≈3490	
	3490	γ	4	5	6	215	128	2.77	≈3489	
	3491	γ	4	5	6	215	128	2.94	o3572	
	3492	γ	4	5	6	215	128	2.72 c		
	3493	γ	4	5	6	215	128	3.04		
	3494	γ	4	5	6	215	128	3.08		
	3495	δ	4	5	6	215	128	2.70 u		
	3496	δ	4	5	6	215	128	2.74 u		
	*3497	ε	4	5	6	215	128	3.03	≈3498	
	3498	ε	4	5	6	215	128	2.70	≈3497	
	3499	ε	4	5	6	215	128	3.14	o3500	
	*3500	ε	4	5	6	215	128	2.84	o3499	
	*3501	α	5	5	7	215	128	2.81	o3452	
	3502	β	5	5	6	215	128	2.99 u	r3514	
	3503	β	5	5	5?	215	128	2.73 c		
	3504	β	5	5	6	215	128	2.95	o3505, 3577	
	*3505	β	5	5	6	215	128	2.99	o3504, 3577	
	3506	β	5	5	6	215	128	3.04		
	3507	β	5	5	6	215	128	2.92	o3431, 3578	
	3508	β	5	5	6	215	128	3.05		
	*3509	β	5	5	6	215	128	2.81		
	3510	γ	5	5	?	215	128	3.34 u		
	3511	γ	5	5	6	215	128	3.23		
	3512	γ	5	5	6	215	128	2.91	≈3513; o3514-15	
	*3513	γ	5	5	6	215	128	3.10	≈3512, o3514-15	
	*3514	γ	5	5	6	215	128	2.69	o3512, 13, 15, r3502	
	*3515	γ	5	5	6	215	128	3.19	o3512-14	
	*3516	δ	5	5	8	215	128	2.96	o3517	
	3517	δ	5	5	6	215	128	2.46 c	o3516	
	*3518	δ	5	5	7	215	128	3.04	r3680	
	3519	ε	5	7	0?	215	128	2.80 c		
	3520	ε	5	5	6	215	128	2.61 c	r3684-85	

Cat.	NMW	Obv type	Rev type	Ours	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	*3521	α	6	5	6	215	128	2.97	<i>o3522; r3534ff</i>	
	*3522	α	6	5	6	215	128	3.28	<i>o3521; r3523-24</i>	
	3523	α	6	5	6	215	128	2.90 u	<i>=3524; r3522</i>	
	*3524	α	6	5	6	215	128	2.93	<i>=3523; r3522</i>	
	*3525	β	6	5	6	215	128	2.91	<i>r3526</i>	
	3526	β	6	5	6	215	128	3.04	<i>r3525</i>	
	*3527	β	6	7	6	215	128	2.86		
	*3528	β	6	6	6	215	128	3.11	<i>o3485,3555ff; r3545</i>	
	3529	β	6	6	6	215	128	2.60 c	<i>=3530</i>	
	3530	β	6	6	6	215	128	2.73 u	<i>=3529</i>	
	3531	γ	6	6	6	215	128	3.07 u	<i>=3532</i>	
	3532	γ	6	6	6	215	128	2.77	<i>=3531</i>	
	3533	γ	6	6	5	215	128	2.68		
	3534	δ	6	5	6	215	128	3.92	<i>=3535-44; r3521</i>	no wreath ties; eleven d/ds
	3535	δ	6	5	6	215	128	3.34	<i>etc</i>	no wreath ties; eleven d/ds
	*3536	δ	6	5	6	215	128	3.17		no wreath ties; eleven d/ds
	3537	δ	6	5	6	215	128	3.15		no wreath ties; eleven d/ds
	3538	δ	6	5	6	215	128	3.14		no wreath ties; eleven d/ds
	3539	δ	6	5	6	215	128	2.99		no wreath ties; eleven d/ds
	3540	δ	6	5	6	215	128	2.92		no wreath ties; eleven d/ds
	3541	δ	6	5	6	215	128	2.86		no wreath ties; eleven d/ds
	3542	δ	6	5	6	215	128	2.80		no wreath ties; eleven d/ds
	3543	δ	6	5	6	215	128	2.69 u		no wreath ties; eleven d/ds
	3544	δ	6	5	6	215	128	2.66 u		no wreath ties; eleven d/ds
	3545	see after 3700								
	*3546	ε	6	5	6	215	128	2.97	<i>=3547; o3548</i>	
	3547	ε	6	5	6	215	128	3.12	<i>=3546; o3548</i>	
	*3548	ε	6	6	5	215	128	2.83	<i>o3546-47</i>	
	3549	ε	6	6	7	215	128	3.01		
	3550	β	7	6	7	215	128	3.08 u	<i>=3551; o3552-53</i>	
	3551	β	7	6	7	215	128	2.79 c	<i>=3550; o3552-53</i>	
	3552	β	7	6	4	215	128	2.86	<i>o3550-1,53</i>	
	3553	β	7	5	7	215	128	2.98	<i>o3550-52</i>	
	3554	β	7	5	7	215	128	3.26		
	*3555	β	7	6	7	215	128	3.50	<i>=3556;</i> <i>o3485,3528,3557-9</i>	
	3556	β	7	6	7	215	128	2.90	<i>=3555;</i> <i>o3485,3528,3557-9</i>	
	3557	β	7	7	6	215	128	3.14	<i>=3558;</i> <i>o3485,3528,3555-9</i>	
	*3558	β	7	7	6	215	128	3.15	<i>=3557;</i> <i>o3485,3528,3555-9</i>	later state of rev. die
	*3559	β	7	6	4	215	128	3.16	<i>o3485,3528,3555-8</i>	
	3560	γ	7	5	7	215	128	3.29		
	3561	γ	7	5	4	215	128	3.24		
	3562	δ	7	6	7	215	128	2.55		
	*3563	ε	7	7	6	215	128	3.08		
	3564	ε	7	6	4	215	128	3.03	<i>=3565-66</i>	
	3565	ε	7	6	4	215	128	2.91	<i>=3564,66</i>	
	3566	ε	7	6	4	215	128	2.85	<i>=3564-65</i>	
	3567	γ	8a	5?	7	215	128	2.74 u	<i>o3458-59</i>	
	3568	δ	8a	5	4	215	128	2.58		
	*3569	ε	8a	5	4	215	128	3.06	<i>=3570-71; o3629-32</i>	
	3570	ε	8a	5	4	215	128	3.04	<i>=3569,71; o3629-32</i>	
	3571	ε	8a	5	4	215	128	3.22 c	<i>=3569-70; o3629-32</i>	
	3572	γ	8b	5	4	215	128	3.23 c	<i>o3491</i>	
	*3573	α	8c	6	4	215	128	2.80	<i>o3574-76</i>	
	3574	α	8c	5	4	215	128	2.85 u	<i>=3575; o3573, 76</i>	
	*3575	α	8c	5	4	215	128	2.59	<i>=3574; o3573, 76</i>	
	*3576	α	8c	5	4	215	128	3.36	<i>o3573-75; r3616,</i> <i>earlier state</i> <i>o3504-5</i>	flaw on obv. die
	*3577	β	8c	5	4	215	128	2.74		

<i>Cut.</i>	<i>NMW</i>	<i>Obs. type</i>	<i>Rev. type</i>	<i>Oars</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
*3578	β		8c	6	5	215	128	2.36	<i>o3431-3507</i>	
3579	β		8c	5	4	215	128	3.25 u		
3580	β		8c	5	5	215	128	2.77		=3581-82
3581	β		8c	5	5	215	128	2.71		=3580,82
3582	β		8c	5	5	215	128	2.95		=3580-81
3583	β		8c	5	6	215	128	2.86		=3584
3584	β		8c	5	6	215	128	2.52		=3583
3585	γ		8c	5	4	215	128	2.98		
*3586	γ		8c	5	4	215	128	2.88		<i>r3709</i>
3587	γ		8c	5	4	215	128	3.59		
3588	γ		8c	5	4	215	128	2.95		
3589	δ		8c	5	4	215	128	3.19 u		
3590	δ		8c	5	4	215	128	2.80 c		<i>o3591</i>
3591	δ		8c	5	4	215	128	3.22		<i>o3590</i>
3592	δ		8c	5	6	215	128	3.50		
3593	δ		8c	5	4	215	128	3.24 u		
3594	δ		8c	5	4	215	128	2.46 c		
*3595	δ		8c	5	4	215	128	3.45		=3596-7; <i>o3598-608</i> ; <i>r3619</i>
3596	δ		8c	5	4	215	128	3.25 u		=3595-7; <i>o3598-603</i> ; <i>r3619</i>
3597	δ		8c	5	4	215	128	2.35		=3595-6; <i>o3598-603</i> ; <i>r3619</i>
3598	δ		8c	5	4	215	128	3.05		=3599-601; <i>o3595-7,604-8, r3620-1</i>
3599	δ		8c	5	4	215	128	3.30		=3598-600-3; <i>o3595-7,604-8</i> ; <i>r3620-1</i>
3600	δ		8c	5	4	215	128	3.40		=3598-9,601-3; <i>o3595-7,604-8, r3620-1</i>
*3601	δ		8c	5	4	215	128	3.14		=3598-600,602-3; <i>o3595-7,604-8, r3620-1</i>
3602	δ		8c	5	4	215	128	2.80		=3598-601,603; <i>o3595-7,604-8, r3620-1</i>
3603	δ		8c	5	4	215	128	3.26 u		=3598-602; <i>o3595-7,604-8, r3620-1</i>
3604	δ		8c	5	4	215	128	3.34		=3605-8; <i>o3596-603</i>
*3605	δ		8c	5	4	215	128	2.99		=3604,6-8; <i>o3596-603</i>
3606	δ		8c	5	4	215	128	3.01 c		=3604-5,7-8; <i>o3596-603</i>
3607	δ		8c	5	4	215	128	2.87		=3604-6,8; <i>o3596-603</i>
3608	δ		8c	5	4	215	128	2.75 c		=3604-7; <i>o3596-603</i>
3609	δ		8c	5	4	215	128	3.43 u		=3610-11
3610	δ		8c	5	4	215	128	3.08		=3609,11
*3611	δ		8c	5	4	215	128	3.09		=3609-10
*3612	ε		8c	5	4	215	128	2.91		=3613; <i>o3449</i>
3613	ε		8c	5	4	215	128	2.55 u		=3612; <i>o3449</i>
*3614	ε		8c	5	4	215	128	3.08		<i>o3443-48</i>
3615	ε		8c	5	4	215	128	3.04		
*3616	ε		8c	5	4	215	128	3.16		<i>r3576; later state of die</i>
3617	ε		8c	5	4	215	128	3.05		
3618	ε		8c	5	4	215	128	3.37		
*3619	ε		8c	5	4	215	128	2.75		<i>o3620-8; r3595-7</i>
3620	ε		8c	5	4	215	128	3.10 u		=3621; <i>o3619,21-8</i> ; <i>r3598-603</i>
*3621	ε		8c	5	4	215	128	2.65		=3620; <i>o3619-20,22-8</i> ; <i>r3598-603</i>
3622	ε		8c	5	4	215	128	2.87		=3623-8; <i>o3619-21</i>
3623	ε		8c	5	4	215	128	3.13		=3622,24-8; <i>o3619-21</i>
3624	ε		8c	5	4	215	128	2.80		=3622-3,25-8; <i>o3619-21</i>
3625	ε		8c	5	4	215	128	2.94		=3622-4,26-8; <i>o3619-21</i>
*3626	ε		8c	5	4	215	128	3.10		=3622-5,27-8; <i>o3619-21</i>
3627	ε		8c	5	4	215	128	2.95		=3622-6,28; <i>o3619-21</i>
3628	ε		8c	5	4	215	128	2.72		=3622-7; <i>o3619-21</i>

Cat.	NMW	Obv type	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	3629	ε	8c	5	4	215	128	3.22	=3630-2; o3569-71; r3704-8	
	3630	ε	8c	5	4	215	128	2.99	=3629-31-2; o3569-71; r3704-8	
	*3631	ε	8c	5	4	215	128	3.42	=3629-10,32; o3569-71; r3704-8	
	3632	ε	8c	5	4	215	128	3.09	=3629-31; o3569-71; r3704-8	
1042	Λ	ε	6'	6	5			2.79		Victory on prow; 2002.14H
Obv. IMP C ALLECTVS P AVG: B1										
1043	*3633	γ	1	8	4	216	-	3.25	o3663	
	*3634	ε	1	8?	4?	216	-	2.82 c	o3635-36	
	*3635	ε	1	9?	5	216	-	3.43	=3636; o3634	
	3636	ε	1	9?	5	216	-	3.15	=3635; o3634	
	*3637	β	2	7	5	216	-	2.68	r3442	
	3638	β	2	7	5	216	-	3.22	=3639	
	*3639	β	2	7	5	216	-	2.98	=3638	
	*3640	δ	2	7	4	216	-	3.55	o3641-56,3697-9; r3443	no steering oar
	3641	δ	2	6	4	216	-	3.36	=3642-53; o3640,54-6,97-9 etc	thirteen d/ds
	3642	δ	2	6	4	216	-	3.33		thirteen d/ds
	3643	δ	2	6	4	216	-	3.32		thirteen d/ds
	3644	δ	2	6	4	216	-	3.11		thirteen d/ds
	3645	δ	2	6	4	216	-	3.11		thirteen d/ds
	3646	δ	2	6	4	216	-	3.09 u		thirteen d/ds
	3647	δ	2	6	4	216	-	2.91		thirteen d/ds
	3648	δ	2	6	4	216	-	2.86		thirteen d/ds
	3649	δ	2	6	4	216	-	2.83		thirteen d/ds
	3650	δ	2	6	4	216	-	2.80		thirteen d/ds
	*3651	δ	2	6	4	216	-	2.76		thirteen d/ds
	3652	δ	2	6	4	216	-	2.72 u		thirteen d/ds
	3653	δ	2	6	4	216	-	2.58		thirteen d/ds
	*3654	δ	2	6	3	216	-	2.70	=3655-56; o3640-53; 3697-9; r3447	
	3655	δ	2	6	3	216	-	2.77	=3654,56; o3640-53; 3697-9; r3447	
	3656	δ	2	6	3	216	-	2.76 u	=3654-55; o3640-53; 3697-9; r3447	
	3657	β	3	5	6	216	-	2.72		
	3658	β	3	5	5	216	-	3.07		
	3659	γ	3	7	6	216	-	3.59		
	3660	ε	3	5	5	216	-	2.96	=3661	
	3661	ε	3	5	5	216	-	3.24	=3660	
	*3664	β	4	5	6	216	-	3.28	o3678,88	
	3665	γ	4	5	6	216	-	2.95	o3666	
	*3666	γ	4	5	6	216	-	3.28	o3665	
	*3667	γ	4	5	6	216	-	3.31	=3668-69; o3670-72	
	3668	γ	4	5	6	216	-	2.70 c	=3667,69; o3670-72	
	3669	γ	4	5	6	216	-	3.26	=3667-68; o3670-72	
	*3670	γ	4	5	6	216	-	3.13	=3671-72; o3667-69	
	3671	γ	4	5	6	216	-	2.71 c	=3670,72; o3667-69	
	3672	γ	4	5	6	216	-	2.38 c	=3670-71; o3667-69	
	3673	δ	4	5	6	216	-	2.79	o3695-6	
	3674	ε	4	5	6	216	-	2.91		
	*3675	ε	4	5	6	216	-	3.30	r3487	
	*3676	α	5	5	4	216	-	3.12	o3677	
	*3677	α	5	5	4	216	-	2.98	o3676	
	*3678	β	5	5	6	216	-	3.19	o3664,88	
	3679	β	5	7	4	216	-	3.02		

<i>Cat.</i>	<i>NAMW</i>	<i>Obv. type</i>	<i>Rev. type</i>	<i>Ours</i>	<i>Crew</i>	<i>Burnett</i>	<i>RIC</i>	<i>Weight (g)</i>	<i>Die links</i>	<i>Notes</i>
	*3680	β	5	5	6	216	—	3.20	r3518	
	3681	β	5	5	6	216	—	3.56 u		
	3682	β	5	5	6	216	—	2.77	a3689	
	*3683	δ	5	5	6	216	—	3.00	a3687 (Victory variant)	
	*3684	ε	5	5	6	216	—	2.71	=3685; r3520	
	3685	ε	5	5	6	216	—	2.78 u	=3684; r3520	
	3686	ε	5	5	6	216	—	3.14		
	*3688	β	6	6	7	216	—	2.74	a3664,78	
	3689	β	6	6	6	216	—	2.96	a3682	
	3690	β	6	5	7	216	—	3.36 u		
	*3691	β	6	7	6	216	—	2.94	a3692	
	3692	β	6	6	6	216	—	3.24	a3691	
	3693	β	6	5	6	216	—	3.19		
	*3694	β	6	6	6	216	—	2.66	r3700	
	3695	δ	6	6	6	216	—	2.77	a3673,96	
	3696	δ	6	6	5	216	—	2.68	a3673,95	
	*3697	δ	6	5	7	216	—	3.49	=3698-99; a3640-56	
	3698	δ	6	5	7	216	—	3.09	=3697,99; a3640-56	
	3699	δ	6	5	7	216	—	2.86	=3697-98; a3640-56	
	*3700	ε	6	6	6	216	—	2.72	a3545; r3694	
	*3545	ε	6	6	6	215	—	2.94	a3700; r3528	
	3701	β	8a	5	4	216	—	3.48 u		
	3702	β	8c	5	4	216	—	2.97		
	3703	β	8c	5	6	216	—	2.89		
	3704	γ	8c	5	4	216	—	2.95	=3705-8; r3629-32	
	3705	γ	8c	5	4	216	—	2.68 u	=3704,6-8; r3629-32	
	3706	γ	8c	5	4	216	—	2.44	=3704-5,7-8; r3629-32	
	3707	γ	8c	5	4	216	—	3.30	=3704-6,8; r3629-32	
	*3708	γ	8c	5	4	216	—	2.89	=3704-7; r3629-32	
	3709	γ	8c	5	4	216	—	3.09 c	r3586	
	3710	γ	8c	5	4	216	—	2.69 c	=3711	
	3711	γ	8c	5	4	216	—	3.45 u	=3710	
	*3712	δ	8c	5	4	216	—	3.21	a3662 (bird variant), 3713	
	3713	δ	8c	5	5	216	—	2.95	a3662 (bird variant), 3712	
	3714	ε	8c	5	4	216	—	3.30 u	=3715; a3716-17	
	*3715	ε	8c	5	4	216	—	3.30	=3714; a3716-17	
	3716	ε	8c	5	4	216	—	2.80 c	a3714-15,17	
	3717	ε	8c	5	4	216	—	2.62 c	a3714-16	
	3718	ε	8c	5	4	216	—	2.50		
	3719	ε	8c	5	5	216	—	3.60		
1044	*3662	δ	3'i	5	7	—	—	2.44	a3712-13	bird on masthead
1045	*3663	γ	3'iii	5	5	—	—	2.80	a3633	animal head prow?
1046	*3687	δ	5'	5	6	—	—	2.76 c	a3683	Victory on prow

Obv. IMP C ALLECTVS AVG; B1

1047	3720	δ	1	10	8	217	129	2.83	=3721-22; a3723,27	
	*3721	δ	1	10	8	217	129	3.04	=3720,22; a3723,27	
	3722	δ	1	10	8	217	129	2.61	=3720-21; a3723,27	
	3723	δ	1	10 ^a	4 ^a	217	129	2.95 c	a3720-22,27	
	3724	ε	1	9	6 ^a	217	129	3.24		
	3725	ε	1	7	6	217	129	2.48		
	3726	δ	2	7	5	217	129	3.75		
	*3727	δ	2	9	6	217	129	2.91	a3720-22,23	
	3728	α	3	5	5	217	129	2.77		
	3729	α	3	6	5	217	129	2.91 c	a2731-32,42	
	*3730	γ	3	5	5	217	129	3.36		
	*3733	γ	4	5	6	217	129	2.65	r3734-36	
	*3734	ε	4	5	6	217	129	2.73	=3735-36; r3733	
	3735	ε	4	5	6	217	129	3.15	=3734,36; r3733	
	3736	ε	4	5	6	217	129	2.64	=3734-35; r3733	
	3737	α	5	6	5	217	129	3.22	=3738-40	

Cat.	NMW	Obv type	Rev type	Oars	Crew	Burnett	RIC	Weight (g)	Die links	Notes
	*3738	α	5	6	5	217	129	3.20	=3737,39-40	
	3739	α	5	6	5	217	129	3.17	=3737-38,40	
	3740	α	5	6	5	217	129	2.99	=3737-39	
	3741	α	5	5	6	217	129	3.07		
	*3742	α	5	5	4	217	129	2.94	o3729,31-32	
	3743	δ	5	5	5	217	129	3.45		
	*3744	ε	7	6	5	217	129	3.28	o3745	
	*3745	ε	7	5	6	217	129	3.01	o3744	
	*3746	α	8a	5	4	217	129	3.27		
	3748	ε	8a	5	4	217	129	3.11		
	3747	γ	8b	5	4	217	129	2.89	o3749	
	3749	γ	8b	5	4	217	129	3.17	o3747	
	*3750	γ	8b	5	4	217	129	3.34		
1048	3731	α	3'ii	6	5	—	—	2.89	=3732; o3729,42	ram-headed prow?
	*3732	α	3'ii	6	5	—	—	3.42	=3731; o3729,42	ram-headed prow?

APPENDIX C: CONSERVATION AND METROLOGY

As found, the coins of the Rogiet hoard were, to a greater or lesser degree, encrusted with copper corrosion products, principally green malachite and red cuprite. Most of the coins were stable and fully identifiable and it was decided to leave these in their 'as found' condition except where cleaning was required to facilitate further numismatic study or where a coin was of numismatic interest or importance. All coins of Aurelian and very high proportions of Ticinum issues of Probus and of the Q-radiates of Allectus were cleaned, for instance.

Coins were also cleaned where encrustations prevented full identification (e.g. distinguishing between *officinae* A and Δ for the TEMPORVM FELICITAS issues of Tacitus) and where the corrosion products appeared to be unstable. In all 2,327 coins (61 per cent of the hoard) were conserved by soaking in an alkaline glycerol solution, followed by thorough rinsing and an element of mechanical cleaning. As regards metrology, therefore, the average weights of groups of coins will not be fully compatible between different issues and mints or with other published figures; and weight distributions will also be distorted to differing degrees, according to the proportions cleaned. In the summary table that follows, average weights are accompanied by figures for the percentage of each group that has been conserved. Typically, the cleaning of aureliani involved a weight loss of 2.0–2.5 per cent (batches of fifty, weighed in bulk); for individual coins, this might vary between 1.2 and 3.9 per cent (in the case of twenty-two coins of Carausius that had an average weight loss of 2.25 per cent). For the most part, the Rogiet coins are in excellent physical state, though small numbers – perhaps those scattered by the repeated ploughing – are distinctly corroded.

The table that follows provides a summary of the average weights of all coin issues represented by fifteen or more specimens in the Rogiet hoard (the figure chosen is arbitrary).

TABLE 18. Average weights of selected issues, Rogiet hoard

Reign	Mint	Issue	Officina	Av. wt (g)	S.D.	No.	% conserved
Victorinus	II	2		3.15	0.70	20	50.0
Aurelian	Rome	6	all	3.93	0.49	18	100
		7	all	4.09	0.38	15	100
		3	all	3.51	0.56	49	100
	Milan	4	all	3.47	0.41	67	100
		4	all	4.00	0.46	36	80.6
Tacitus	Lyon	1	all	3.94	0.50	84	21.4
		3	all	3.97	0.49	58	67.2
			C	4.03	0.52	38	65.8
		5	all	3.99	0.50	142	41.5
			A	4.02	0.56	68	41.2
			B	4.04	0.47	27	55.6
			Δ	3.89	0.41	43	37.2
		7	all	3.87	0.36	172	36.6
			A	3.83	0.36	43	34.9
			B	3.89	0.35	41	29.3
			C	3.95	0.40	44	29.5
			Δ	3.81	0.34	43	54.5
		8	all	3.85	0.36	19	73.7

<i>Reign</i>	<i>Mint</i>	<i>Issue</i>	<i>Officina</i>	<i>Avg. wt (g)</i>	<i>S.D.</i>	<i>No.</i>	<i>% conserved</i>
Probus	Rome	2	all	3.81	0.50	59	55.9
		3	all	3.99	0.44	31	74.2
		1	all	3.79	0.31	18	50.0
		2	all	3.95	0.44	48	52.1
	Lyon	1	all	3.96	0.34	19	73.7
		2	all	4.02	0.48	90	30.0
			I	4.16	0.71	17	47.1
			II	3.95	0.48	23	26.1
			III	4.05	0.43	28	25.0
			III	3.96	0.27	22	27.3
		3	all	4.04	0.50	73	42.5
			I	4.11	0.56	16	31.3
			II	4.03	0.46	24	41.7
			III	4.02	0.52	24	50.0
		4	all	3.95	0.45	239	22.1
			I	3.91	0.51	55	21.8
			II	3.96	0.43	73	20.5
			III	3.91	0.46	48	16.7
			III	4.00	0.40	61	29.5
		'5'	all	3.98	0.50	15	100
		6	all	3.92	0.42	129	33.6
			I	4.04	0.38	43	23.8
			III	3.86	0.44	47	48.9
			III	3.90	0.38	33	21.2
		8	all	3.95	0.52	40	42.5
		9	all	3.94	0.43	244	28.3
			A	3.94	0.41	49	18.4
			B	3.97	0.52	59	36.2
			C	3.90	0.36	77	29.9
			D	3.93	0.46	59	20.3
	Rome	1	all	3.86	0.54	51	76.5
		3	all	3.79	0.44	16	56.3
		5	all	3.94	0.52	25	48.0
		6	all	3.78	0.45	77	55.8
			Γ	3.80	0.38	18	44.4
			Δ	3.72	0.51	18	72.2
	Ticinum	2	all	4.05	0.66	49	69.4
			P	3.98	0.47	16	50.0
		3	all	3.82	0.45	21	100
		4	all	3.83	0.41	32	50.0
		6	all	3.83	0.40	26	80.8
		9	all	3.91	0.47	70	34.3
		10	all	3.78	0.45	22	18.2
	Siscia	7	all	3.84	0.44	17	76.5
Carus et sui	Lyon	6	all	3.80	0.39	16	62.5
	Ticinum	2	all	3.82	0.47	23	78.3
Dio & Max	Lyon	1b	all	3.90	0.52	31	25.8
		2	all	3.90	0.41	60	46.7
		7-8	all	3.89	0.36	88	47.1
	Ticinum	2→	all	3.94	0.47	32	46.9
Allectus	C	QC	Laetitia	3.05	0.26	129	93.8
		QC	Virtus	2.99	0.26	328	87.5
	London	QL	all	2.95	0.37	292	96.6

The Lyon mint figures may be compared with those published by Bastien: while they are broadly comparable, in virtually every case the Rogiet average is the higher, as might be expected from the proportions of unconserved coins in the samples.⁹²

Of the coinages summarised here, only the Q-radiates of Allectus are both numerous and for the most part cleaned. Summary statistics for these are presented in Table 19 and charts of their weight distributions in Fig. 10.

TABLE 19. Descriptive statistics: weights of Allectus, Q radiates (grams)

	<i>QL all</i>	<i>QC all</i>	<i>QC Laetitia</i>	<i>QC Virtus</i>
Mean	2.952	3.009	3.053	2.991
Standard Error	0.022	0.012	0.023	0.015
Median	2.908	3.003	3.041	2.984
Standard Deviation	0.371	0.265	0.261	0.265
Minimum	2.08	2.35	2.42	2.35
Maximum	4.48	4.15	4.15	3.92
Sum	861.88	1374.88	393.77	981.11
Count	292	457	129	328

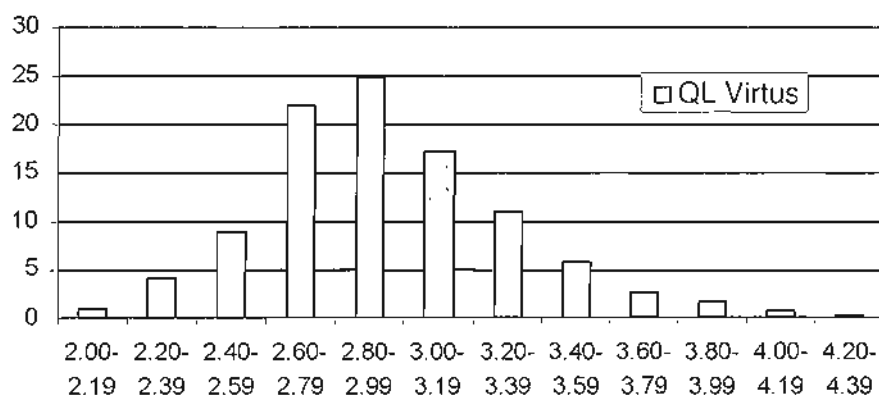


Fig. 10a. Percentage weight distribution: Allectus, London.

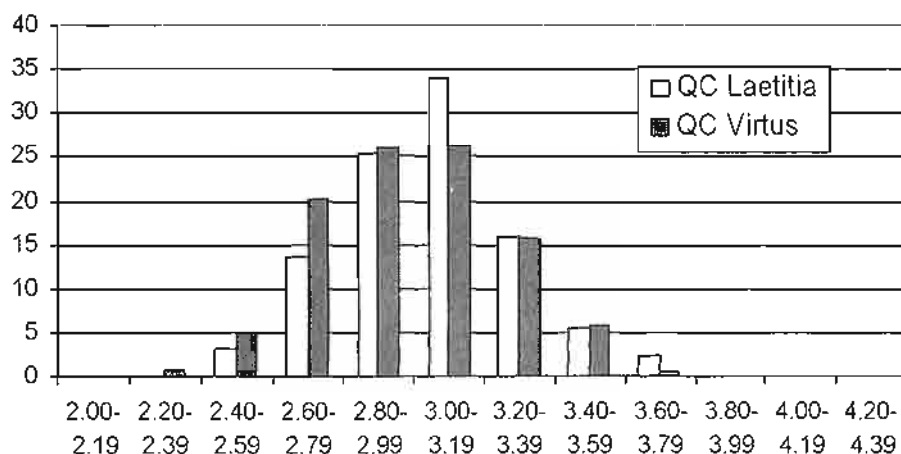


Fig. 10b. Percentage weight distributions: Allectus, C mint.

⁹² Bastien 1972, 82; 1976, 96 n. 20

Very few single issues of aureliani in the Rogiet hoard match the Q-radiates for size. The percentage weight distributions for the two largest – issues 4 and 9 of Probus at Lyon, are shown as Fig. 11, though bearing in mind the comments at the head of this appendix, these are intended simply as indications of the broad weight distributions that appear to be typical of all issues of aureliani, as was to be the case for the *nummus*-issues of Diocletian and his colleagues from the mid 290s.⁹³ Almost all weights typically lie between 3 and 5 g, with tails each of around 1.5 per cent of specimens above 5 g and below 3 g, the extremes in the Rogiet hoard being 7.72 g (Probus, Ticinum 652/1) and 2.66 g (Tacitus, Lyon 325/12).

One coin (0.4%) and three coins (1.3%) weighing over 5.50 g are omitted from issues 4 and 9 respectively.

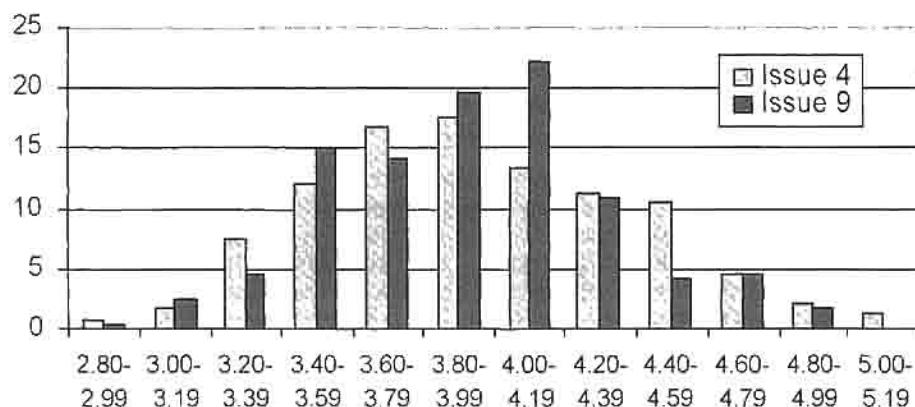


Fig. 11. Percentage weight distributions: Probus, Lyon.

APPENDIX D: ANALYSES OF COINS FROM THE ROGIET HOARD

MARY DAVIS

A detailed study of the metallurgy of the coin types in the Rogiet hoard lies beyond the scope of this paper, though the excellent preservation of the bulk of the coins holds the promise of useful work in the future, both as regards composition and, potentially, in the study of the technique(s) used to prepare blanks with silvered surfaces. However, as part of the study of the coins of Allectus, a sample of Q-radiates and, for comparison, aureliani, was analysed.

The coins were prepared for analysis by polishing their edges until the uncorroded core was reached and a flat tangential surface obtained. The Carausius and Allectus coins were analysed by energy dispersive X-ray spectrometry (EDX) using a CamScan MaXim 2040 scanning electron microscope (SEM) with a Link Isis energy-dispersive X-ray detector. The polished surface of the coins was analysed for 100 live seconds using a working distance of 35 mm and an accelerating voltage of 20 kV. The coins were placed in a metal clamp to aid conductivity and no coating was necessary. The results were quantified using a ZAF correction program. The listed results in the table are the average of three analyses from separate areas on the polished surface. All analyses totalled between 98.5 and 101.5%, and were then normalised to 100%.

SEM-EDX has the advantage over wavelength dispersive spectrometry (WD) in that as large an area as possible, usually between $\times 200$ and $\times 1500$ magnification in this case ($\times 20000$ is used for WD analysis) can be selected for analysis which helps to reduce any distortion of the composition of the sample due to its heterogeneity, especially where lead is present in the alloy. However, SEM-EDX is less effective in analysing trace elements and in quantifying minor elements, but does produce relatively accurate analyses for the major elements. These results are therefore most useful for examining the variations in the main constituents of the copper alloys. The exact limits of detection depend on several factors including matrix and counting time: representative figures for EDX are from 0.05 to 0.26 weight % of the element.⁹⁴

Some previous analyses of coins from the hoard had been undertaken by WD analysis, using a MicroSpec WD spectrometer. The resulting paper published by Anheuser and France aimed to assess how the coins had been silvered, concluding that this was achieved using electrochemical replacement silvering with a silver chloride paste.⁹⁵ However, recent research at Bradford University has found evidence for amalgam silvering on similarly alloyed and plated coins.⁹⁶ Anheuser and France had not selected to look for the presence of mercury during their WD analysis, so some of

⁹³ For example, the Bridgend hoard: Besly 2002, 180, 210–15.

⁹⁴ Pollard and Heron 1996, 52.

⁹⁵ Anheuser and France 2002.

⁹⁶ Vlachou *et al.*, in press.

the coins from their original analyses were reassessed, using the same instrument. Small traces of mercury were found in the silver, but considerably less than in the results obtained by Vlachou *et al.*; and so this issue remains inconclusive and needs further research.

TABLE 20. Rogiet hoard: composition of some coins of Carausius and Allectus (four major elements, %)

			Cu	Ag	Sn	Pb
Carausius						
	<i>Aurelianus</i>					
996/1	PAX AVGGG	S P // C	94.7	2.5	1.5	1.3
Allectus						
	<i>Aureliani</i>					
1006	ORIENS AVG	S P // ML	91.9	2.1	2.5	3.5
1007	LAETITIA AVG	S P // C	94.5	3.5	1.4	0.8
1008	FIDES MILIT	S P // C	95.5	2.3	1.5	0.7
	<i>Q-radiates</i>					
1017 (3176)	VIRTUS AVG	// QL	92.7	1.4	2.4	3.4
1017 (3201)	VIRTUS AVG	// QL	92.7	1.2	3.5	2.7
1017 (3244)	VIRTUS AVG	// QL	94.1	1.5	2.1	2.4
1020 (3269)	VIRTUS AVG, r.	// QL	94.1	1.7	1.8	2.4
1031 (3320)	LAETITIA AVG (1)	// QC	94.9	1.9	1.7	1.5
1035 (3373)	LAETITIA AVG (2)	// QC	93.8	1.3	2.1	2.7
1035 (3380)	LAETITIA AVG (2)	// QC	93.7	1.2	1.3	2.8
1041 (3537)	VIRTUS AVG	// QC	95.4	1.3	1.1	2.2
1043 (3642)	VIRTUS AVG	// QC	96.0	1.3	1.0	1.7
1043 (3689)	VIRTUS AVG	// QC	94.8	1.7	1.8	1.7
1043 (3704)	VIRTUS AVG	// QC	94.2	1.4	1.4	3.0

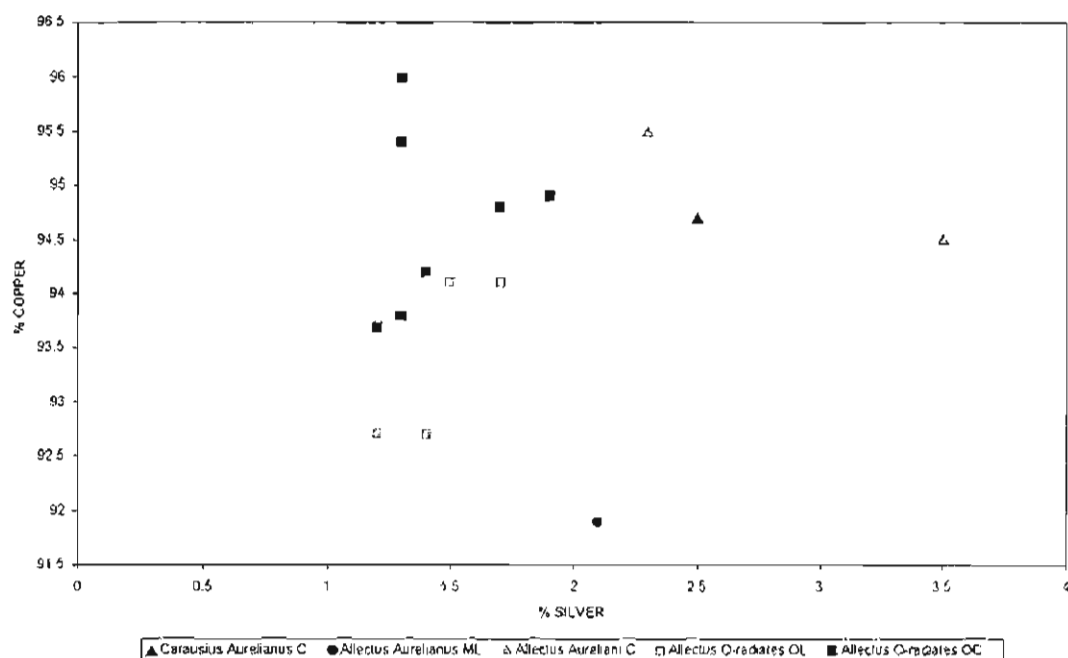


Fig. 12a. Rogiet: scatter plot, Copper v. Silver, Carausius and Allectus.

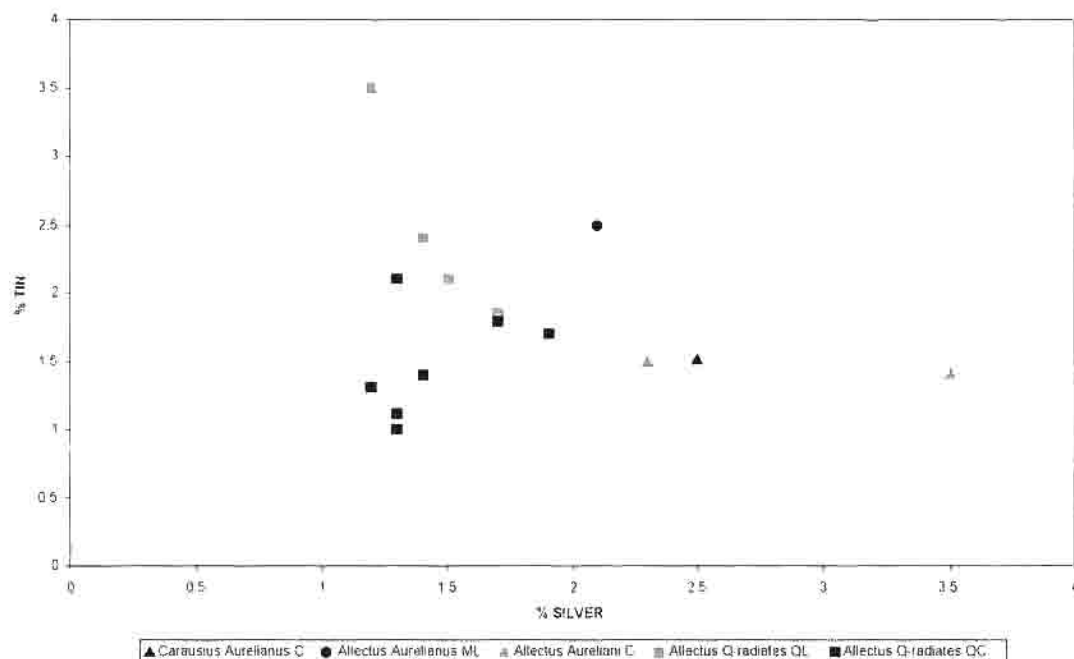


Fig. 12b. Rogiet: scatter plot, Tin v. Silver, Carausius and Allectus.

Scatter plots for copper and tin against silver from Table 20 are given as Figs 12a and 12b. These appear to demonstrate the possibility that the alloys used at London differed from those at 'C' in that London tin contents are generally higher than those of 'C' and usually above two per cent, whilst those at 'C' are generally below two per cent; further evidence, perhaps, of differing practices and two separate mints. Cope's figures for Allectus appear to bear this out, but with a combined sample of only twenty coins of Allectus, more work would need to be done to confirm or modify this view.⁹⁷

BIBLIOGRAPHY OF HOARDS

IRBCH = A.S. Robertson, *An Inventory of Romano-British Coin Hoards* (London, 2000)

- | | |
|---------------------------|--|
| Appleshaw, Hants. | R. Bland and A. Burnett, <i>CHRB</i> VIII (1988), 98–107; <i>IRBCH</i> 744. |
| Authieux | D. Hollard, 'La trouvaille des Authieux (II)', <i>TM</i> XI (1989), 79–112. |
| Balkan | R. Bland, 'A third century hoard from the Balkans', <i>CH</i> VII (1985), 186–208. |
| Banwell, Somerset | P. Cunow, 'Roman coins from Wint Hill, Banwell, Somerset', <i>NC</i> 1971, 227–35; <i>IRBCH</i> 827. |
| Bath, Somerset | D.R. Rudling and P. Shilling, <i>CHRB</i> VI (1986), 161–82; <i>IRBCH</i> 925. |
| Blackmoor, Hants | R. Bland, <i>The Blackmoor Hoard</i> (<i>CHRB</i> III, 1982); <i>IRBCH</i> 914. |
| Bowcombe, Isle of Wight | R. Bland, A. Cepas and M. Tosdevin, <i>CHRB</i> X (1997), 264–78. |
| Brains-sur-les-Marches | D. Hollard, 'Le trésor de Brains-sur-les-Marches', <i>TM</i> XIX (2000), 57–116. |
| Burton Latimer, Northants | R. Bland, 'A hoard of Carausius and Allectus from Burton Latimer', <i>BNJ</i> 54 (1984), 41–50; <i>IRBCH</i> 923. |
| Chalfont, Bucks | C. Cheesman, <i>CHRB</i> IX (1992), 154–205; <i>IRBCH</i> 740A. |
| Chalgrove, Oxfordshire | C.E. King, <i>CHRB</i> IX (1992), 125–53; <i>IRBCH</i> 756A. |
| Childs Ercall, Shropshire | A.M. Burnett and A. Tyler, <i>CHRB</i> V (1984), 6–21; <i>IRBCH</i> 757. |
| Ciron IV | J. Nesler, D. Hollard and M. Bompaire, 'Le trésor de Ciron IV (Indre)', <i>TM</i> XIX (2000), 129–60. |
| Colchester, Essex | A.H. Baldwin, 'A find of coins of Carausius and Allectus from Colchester', <i>NC</i> 1930, 173–95; <i>IRBCH</i> 910. |
| Coleby, Lincolnshire | E. Besly and R. Bland, <i>CHRB</i> V (1984), 22–60. |
| Colonne | S. Estiot, 'Le double trésor de Colonne (Jura), terminus 298 AD', <i>TM</i> XVII (1998), 107–80. |
| Croydon, Surrey | A. Burnett and P.J. Casey, 'A Carausian hoard from Croydon, Surrey, and a note on Carausius's continental possessions', <i>BNJ</i> 54 (1984), 10–20; <i>IRBCH</i> 860. |
| Cunetio, Wiltshire | E. Besly and R. Bland, <i>The Cunetio Treasure</i> (1983); <i>IRBCH</i> 707. |

⁹⁷ Cope *et al.* 1997, 33.

- Erw-hên, Carmarthen
Ewelme, Oxfordshire
G.C. Boon, 'The Erw-Hên treasure trove of Roman antoniniani'. *NC* 1966, 157–63.
C.M. Kraay, 'A third century hoard of Roman coins from Ewelme', *Oxoniensia* 17/18 (1952–3), 234–5.
- Fresnoy-lès-Roye
Godmanchester, Hunts.
P. Bastien and F. Vasselle, *Les Trésors Monétaires de Fresnoy-lès-Roye (Somme)*, 1971.
H.J.M. Green, 'Romano-British hoard from Godmanchester', *Cambridgeshire Antiquarian Society Proceedings* L (1956), 85–8; *IRBCH* 915.
- Hollingbourne, Kent
Kirkby, Notts.
R.A.G. Carson, 'Hollingbourne treasure trove', *NC* 1961, 211–23; *IRBCH* 746.
R. Bland, *CHRB* VIII (1988), 108–13; *IRBCH* 756.
- Knaresborough, N. Yorks.
Lacock, Wiltshire
Linchmere, Sussex
Maltby, S. Yorkshire
Maravielle
Minster, Kent
Monkton Farleigh, Som.
Montbouy
C. Barclay, *CHRB* X (1997), 279–83.
R. Bland, *CHRB* IX (1992), 208–16; *IRBCH* 930A.
P.H. Webb, 'The Linchmere hoard', *NC* 1925, 173–235; *IRBCH* 861.
I.A. Carradice, *CHRB* II (1981), 27–47; *IRBCH* 763.
S. Estiot, 'Le trésor de Maravielle (Var)', *TM* V (1983), 9–115.
R. Bland, *CHRB* VIII (1988), 74–91; *IRBCH* 747.
- Montcreau
Much Wenlock, Shropshire
Navis-Mühlen
J.-B. Giard, 'Le trésor de Montcreau', *RN* 6.XIV (1972), 184–207.
S. Ivens and A.M. Burnett, *CHRB* II (1981), 49–61; *IRBCH* 822.
H.-J. Kellner, L. Zimmer-Plank and E. Kellner, 'Ein römischer Münzschatz von Navis-Mühlen im Wipptal', *Veröffentlichungen des Museum Ferdinandeum* 64 (1984), 57–236.
- Nieder-Rentgen
H. v. Hammerstein, K. Wichmann and G. Wolfram, 'Der Münzfund von Nieder-Rentgen', *Jahrbuch der Gesellschaft für lothringische Geschichte und Altertumskunde* 8.2 (1896), 1–43.
- Normanby, Lincolnshire
Pen-y-Corrdyn, Clwyd
R. Bland and A. Burnett, *CHRB* VIII (1988), 114–215; *IRBCH* 854.
R.J. Brewer, 'A hoard of Roman coins from Pen-y-Corrdyn hillfort', *BBCS* 28 (1978–80), 747–50; *IRBCH* 948.
- Plovdiv
Riby, Lincolnshire
N.A. Mouchmov, *Annuaire du Musée National Bulgare* VI (1932–4).
P. Tyler, *The Persian Wars of the 3rd Century AD and Roman Imperial Monetary Policy AD 253–68* (1975); *IRBCH* 732.
- Sainte-Pallaye
Saint-Maurice
S. Estiot, M. Amandry and M. Bompaire, 'Le trésor de Sainte-Pallaye (Yonne)', *TM* XIV (1993), 39–124.
S. Estiot, 'Le trésor de Saint-Maurice-de-Gourdains – Pollet (Ain)', *TM* XVI (1997), 69–127.
- Somerset
Svetozarevo
Tattershall Thorpe, Lincs.
Troussey
La Venèra
E.M. Besly, *CHRB* II (1981), 63–8; *IRBCH* 944 ('Sparkford').
N.A. Cmornja, *Ostava Rimskog Novca iz Svetozarevo Valerijan – Diokletijan* (1987).
E. Besly and R. Bland, *CHRB* IV (1984), 105–37; *IRBCH* 753.
S. Estiot, 'Le trésor de Troussey (Meuse) ...', *TM* XVII (1998), 181–303.
L.A. Milani, *Il ripostiglio della Venèra, Monete romane della seconda metà del terzo secolo* (1880). *Ripostiglio della Venèra Nuovo Catalogo Illustrato: vol. III/1 Aureliano* (S. Estiot, 1995); *III/2 Tacito e Floriano* (S. Estiot, 1987); *IV Caro – Diocleziano* (D. Gricourt, 2000).

Not published in detail:

- Bitterne, Hampshire
East Harnham, Wiltshire
Gilmorton, Leicestershire
Gloucester
Kirmington, Lincolnshire
Langtoft A.E. Yorkshire
Old Ford, London
Penard, Gower
Watchfield, Berkshire
IRBCH 913.
IRBCH 930: m/s list provided by David Algar, Salisbury and S. Wiltshire Museum, 1999.
1.254 billion to Allectus: found February 2004, information and list from Richard Abdy, British Museum.
IRBCH 912: provisional summary by reign in *Bristol and Gloucestershire Archaeological Society Transactions* 99 (1981), 106 f. New catalogue in preparation: the present report uses details of coins from Gallienus to Aurelian (listed by R. Abdy) and Probus (E. Besly).
IRBCH 751: m/s catalogue by H.E. Pagan in British Museum.
976 billion (radiates, aureliani, denarii and nummi) to c.305: found September 2000. *Treasure Annual Report 2000*, 118, no. 255.
IRBCH 919: W. Allen, 'Find of coins of Allectus at Old Ford, Bow', *NC* 1860, 304–6.
IRBCH 870: G.C. Boon, 'The Penard Roman Imperial hoard: an interim report ...', *Bulletin of the Board of Celtic Studies* 22 (1966–8), 291–7. Coins in NMW, Cardiff.
IRBCH 908: five coins in BM (1907–9–2, 1–5).

REFERENCES

- Allen, W. (1860) 'Finds of coins of Allectus at Old Ford, Bow', *NC* 2nd series vol. 1, 304–6.
Alix, S. and Lempereur, O. (2005) 'Monnaies romaines découvertes en fouilles à Cavillargues (Gard)', *BSFN* 60/3, 50–5.
Amandry, M., Estiot, S. and Gautier, G. (2003) *Le monnayage de l'atelier de Lyon (43 av. J.-C. – 413 apr. J.-C.)*. *Supplément II* (Wetteren).

- Anheuser, K. and France, P. (2002) 'Silver plating technology of the late 3rd century Roman coinage'. *Historical Metallurgy* 36/1, 17–23.
- Bastien, P. (1972) *Le monnayage de l'atelier de Lyon: Dioclétien et ses corégentes avant la réforme monétaire (285–294)* (Wetteren).
- Bastien, P. (1976) *Le monnayage de l'atelier de Lyon: de la réouverture de l'atelier par Aurélien à la mort de Carin, fin 274 – mi-285* (Wetteren).
- Bastien, P. (1992) *Le buste monétaire des empereurs romains I* (Wetteren).
- Bastien, P. (1993) *Le buste monétaire des empereurs romains II* (Wetteren).
- Bastien, P. (1994) *Le buste monétaire des empereurs romains III* (Wetteren).
- Bastien, P., Amandry, M. and Gautier, G. (1989) *Le monnayage de l'atelier de Lyon (274–413). Supplément* (Wetteren).
- Beaujard, B. and Huvelin, H., 1980. 'Le trésor de Rouen et l'occupation de la Gaule par Carausius'. In: N. Gauthier (ed.), *Histoire et numismatique en Haute-Normandie (Cahier des Annales de Normandie 12A)*, 63–91.
- Besly, E. (1984) 'A system for the description of obverse busts on antoniniani'. *CHRB* IV, 1–5.
- Besly, E. (2002) 'A hoard of Tetrarchic *nummi* from Bridgend, South Wales', *NC* 162, 169–215.
- Besly, E. (2003) 'Lyon mint coins in the Rogiet hoard', *BSFN* 58/4, 64–70.
- Besly, E. and Bland, R. (1983) *The Cunetio Treasure* (London).
- Bland, R. (1982) *The Blackmoor Hoard (CHRB III)*.
- Bland, R. (1984) 'A hoard of Carausius and Allectus from Burton Latimer'. *BNJ* 54, 41–5.
- Bland, R. (1991) *The coinage of Gordian III from the Mints of Antioch and Caesarea*. Unpublished PhD thesis, University of London.
- Bland, R. and Burnett, A. (1988) 'Normanby, Lincolnshire'. *CHRB* VIII, 114–215.
- Burnett, A. (1984) 'The coinage of Allectus: chronology and interpretation'. *BNJ* 54, 21–40.
- Buttery, T.V. (1994) 'Calculating ancient coin production II: Why it cannot be done', *NC* 154, 341–52.
- Carson, R.A.G. (1982) 'Carausius et Frater sui': a reconsideration'. In S. Scheers (ed.), *Studia Paulo Naster Oblata I: Numismatica Antiqua* (Leuven), 245–58.
- Casey, P.J. (1994) *Carausius and Allectus: the British Usurpers* (London).
- Cheesman, C. (1997) 'The radiate hoards'. *CHRB* X, 171–9.
- Cope, L.H., King, C.E., Northover, J.P. and Clay, T. (1997) *Metal analyses of Roman coins minted under the Empire* (BM Occasional Paper 120).
- Estiot, S. (1983) 'Le trésor de Maravielle (Var)', *Trésors Monétaires* 5, 9–115.
- Estiot, S. (1987) *Ripostiglio della Venèra: nuovo catalogo illustrato: Tacito e Floriano* (vol. II/2) (Rome).
- Estiot, S. (1995) *Ripostiglio della Venèra: nuovo catalogo illustrato: Aureliano* (vol. II/1) (Rome).
- Estiot, S. (2004) *Monnaies de l'Empire romain XII.1 D' Aurélien à Florian (270–276 après J.-C.)* (Paris).
- Esty, W.W., 1986. 'Estimation of the Size of a Coinage: a Survey and Comparison of Methods', *NC* 146, 185–215.
- Gricourt, D. (1983) 'Deux antoniniens inédits de l'atelier de Lyon', *BSFN* 38/5, 322–6.
- Gricourt, D. (2000a) *Ripostiglio della Venèra: nuovo catalogo illustrato: Caro – Diocleziano* (vol. IV) (Rome).
- Gricourt, D. (2000b) 'Sur l'éphémère existence de Nigrinien fils de Carin et de Magnia Urbica'. *BSFN* 55/2, 34–9.
- Grierson, P. and Blackburn, M. (1986) *Medieval European Coinage I. The Early Middle Ages (5th – 10th centuries)* (Cambridge).
- Horstmann, H. (1966) 'Der Adler Karls des Grossen', *Archivum Heraldicum* 1966, 18–21.
- Kent, J.P.C. (1973) 'Gallienae Augustae', *NC* 133, 64–8.
- Lloyd, C.D. (1998) 'The C mint of Carausius and Allectus', *BNJ* 68, 1–10.
- Lyne, M. (2003) 'Some new coin types of Carausius and Allectus and the history of the British provinces AD 286–296'. *NC* 163, 147–68.
- Lyon, C.S.S. (1989) 'Die estimation: some experiments with simulated samples of a coinage', *BNJ* 59, 1–12.
- Marvell, A.G. (1996) 'Rogiet (Housing Allocation) H2RO1', *Archaeology in Wales* 36, 78.
- Mason, D.J.P. (2003) *Roman Britain and the Roman Navy* (Stroud).
- Mattigly, H. (1951) 'The clash of the coinages circa 270–296', In P.R. Coleman-Norton (ed.), *Studies in Roman economic and social history in honor of Allen Chester Johnson* (Princeton), 275–89.
- Orna-Ornstein, J. (1995) 'Ships on Roman coins', *Oxford Journal of Archaeology* 14, 179–200.
- Pink, K. (1949) 'Der Aufbau der römischen Münzprägung in der Kaiserzeit, VI/1 Probus', *Numismatische Zeitschrift* 73, 13–74.
- Pollard, A.M. and Heron, C. (1996) 'Analytical techniques applied to archaeology', In *Archaeological Chemistry* (London: Royal Society of Chemistry), 20–80.
- Robertson, A.S. (1978) *Roman Imperial Coins in the Hunter Coin Cabinet, University of Glasgow IV. Valerian I to Allectus* (Oxford).
- Shiel, N. (1977) *The episode of Carausius and Allectus* (Oxford, BAR 40).
- Stewartby, Lord (1996) 'VIRTVS, a new London type for Constantine Caesar (AD 307)', *NC* 156, 157–63.
- Vlachou, C., McDonnell, J.G. and Janaway, R.C. (in press) 'Experimental investigation of silvering in late Roman coinage', *Materials issues in art and archaeology* (Pittsburgh, Materials Research Society).
- Webb, P.H., 1906. 'The coinage of Allectus', *NC* 4th series, 6, 127–71.
- Williams, H.R.G. (2004) *Carausius: a consideration of the historical, archaeological and numismatic aspects of his reign* (Oxford, BAR 378).



PLATE 4







352

358

368/1

372

377/1

381A



387

398

405

408

410/2

415



420

421

422

423

427

437/2



440

444

446



PLATE 8







596/3

605

607/2

610/10

611/1

617



619

627/3

629

631/1

632/1

636



640

644

646

651/3

652/1

653/2



654

661

665



666

667

668

669

670

671



675

676

679

680

681

682/1



683

684/2

685/2

688

689

690



691

697

700



702

704

705

706

707

716/1



721

722

723

725

742

744/6



750/3

757/2

760

763/1

764

767



768

777

778



799

800

801

802

804

805



807

808

817/1

821

828/1

830/1



834

839

845

852

854

857



869

870/1

871





983

985

986

987

988

990



991

992

994

996/1

996/2

997



998

1000

1001

1002

1003

1005



1006

1007

1008





BESLY: THE ROGIET HOARD (15)





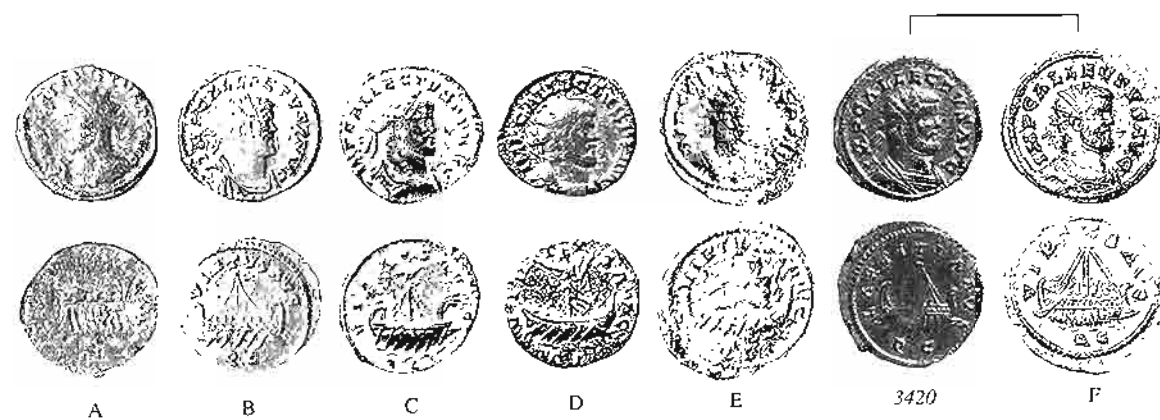












BESLY: THE ROGIET HOARD (23)